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TO more clearly express the present character of THE INLAND ARCHITECT than did the name under which it has been heretofore published, the title of the journal is changed with this number to THE INLAND ARCHITECT AND NEWS RECORD. It is gratifying to us to be able to announce that we have received subscriptions and encouragement enough to warrant the publication of a gelatine edition of THE INLAND ARCHITECT, at \$8 per year. The first number is in preparation and will be issued soon. Not the least pleasant incident in our new venture, is the interest shown by our subscribers in the advancement of THE INLAND ARCHITECT, and the expressions of approval and encouragement which we are receiving.

THE bill for the examination and licensing of architects has received the attention of the different state associations, where legislatures meet this year, and is being vigorously pushed. As yet, however, the most encouraging report comes from Texas, where the bill has been reported back from the senate committee with a minority report in its favor, and though not as yet reported upon in the house, it will meet with no opposition from that body. It will be very creditable to the Texas State Association if theirs is the first to make this bill a law, and the Lone Star State the first to recognize architecture as a profession. We are not surprised at this, though inclined to extend very hearty congratulation. It was in this state that the members of this association, when that body was but three months old, refused to compete with contractors in designing public or private buildings, and so ably presented the case, and the rules of professional practice, before a commissioners' court, that the latter decided to sustain the architects and reject the contractors.

THE coming convention of national builders, which will occur in Chicago, March 29, to form a national association, is creating a widespread interest throughout the country. As we have said on this subject the work of the association should, among other things, be directed toward an intelligent discussion of the labor problem. Not as master builders, or essentially from the master builders' standpoint, but from that of the workmen as well. It is now quite apparent to intelligent and unprejudiced minds that the present methods of trades unions, seeking redress for all grievances, fancied or real, in strikes, is ephemeral, the members of unions themselves being generally convinced of its impotency. But this does not in any way settle the disturbing question. It lies deeper than the question of wages with workmen, or the accumulation of capital by the employers. But it remains for these builders to intelligently and dispassionately discuss the question, and then set about righting it, working as men should for the good of the workmen as well as for themselves. There should be no treating with trades unions as they now exist, for this only means the recognition of the "walking delegate" and not the workman, and nothing can be done through that channel.

WE would consider any movement toward the consolidation of the trades to resist strikes as being ill-advised for a national body to attempt. Locally, and as a temporary measure only, this might have to be resorted to; but it is evident that the people everywhere are becoming tired of the complaints against the oppression of capital on the one hand,

and of the assumption of authority by secret societies that blindly follow the leadership of one or a few men, on the other. The laws of the country must be maintained and these acts which, stripped of their cloaks of the "rights of capital," or the "rights of labor," are simply revolutionary in their character and must be stopped or the people will make laws which, however arbitrary and contrary to our existing institutions, will restrict capital and control labor. This, if the chain of logic is followed out, must be the ultimate result. But we have little fear that this extreme will ever be reached. The remedy is easily within the reach of such men as we expect to see assembled at the coming convention, and who, by meeting the fact squarely, can project plans for its permanent correction.

NOW that a movement toward a national organization of master builders is inaugurated, a vital question that should come before the assembly for consideration, is that of trade education. The question of "where shall we obtain skilled workmen?" is one that has to be met squarely; that it is already becoming a question, and at the present unanswerable, is a fact which we need not emphasize. But one solution for this under the present order of things can be looked for, and that is the education of the youth by the master. The apprenticeship indenture system of the middle ages and of a later date, when the master worked with his men, and the greater the skill they attained the greater his profits, has gone, and a new method must be supplied. This, we would urge, will be found in the establishment of trade (not manual) schools, and this the assembly of national builders should discuss and act upon. In New York such a school as we refer to has been established for the past five years, and now teaches by practical example the plumbing, fresco-painting, bricklaying, stonecutting, plastering, carpentry, wood carving and gasfitting trades, the first instruction having been confined to the first two trades only. At this school three evenings in a week for a term of less than six months, from November till April, has been found sufficient, under the guidance of skilled workmen, to turn out workmen of average ability.

IN Chicago this movement should have been started long ago, and it is the duty of the Builders and Traders' Exchange to not only inaugurate but support such a school. We do not hold the New York school up as a model, its methods could doubtless be improved upon, but give it as a sample of what should be done. The Exchange has money in its treasury, and if it had none, a sufficient sum could easily be raised for so worthy an object. The Chicago Master Plumbers have a school for "helpers," which is a move in the right direction, but does not go far enough. The most effective course is a general school, teaching all branches of the building trades. If those who are inclined to favor combinations of master builders to resist combinations of trades unions, would spend their time and energies in such work as this, they would arrive at not only the solution of this problem of the hour, the equalization of capital and labor, but would lay the foundation for its permanent settlement. We urge this upon the Chicago Exchange, because with its powerful organization it could accomplish much, and the builders in smaller cities would rapidly follow its example. The matter should not be gone into hastily. It should be discussed, a committee sent to New York, and perhaps to the Worcester Free Institute, to Hampton and Carlisle, to investigate their methods and results, and thus be better prepared to inaugurate and establish a trade school, the necessity of which is beyond question.

IT is not often that an architect prefers charges against his client, and when Architect S. M. Randolph stated at a recent meeting of the Illinois State Association that he had done this in regard to the commissioners in charge of the Soldiers' and Sailors' Home building, of which he was the architect, somewhat of a sensation was created. The facts, as we understand them, seem to be that early last summer Mr. Randolph was appointed architect of a home for soldiers and sailors to be built at Quincy. Bids were advertised for a complete building, and were made in regular form from the architects' plans. When opened it was found that one firm, whose bid was about third from the lowest, attached a supplementary bid, making alterations in the plan and cheapening the building, the figure for which was lower than the lowest regular bid. For some reason this was accepted by the trustees in charge, and the architect instantly sent in his resignation.

THOUGH this caused a reconsideration of the bids, and the contracts were finally let to the satisfaction of the architect, the best of feeling, as is not surprising, did not exist between architect and principals. After several months the architect saw fit to make the following charges:

To whom it may concern:

DECEMBER 30, 1886.

This is to certify that the writer is knowing to the following facts:

At the last General Assembly of the Senate and House of Representatives holden in Springfield, Illinois, a bill was passed, known as Senate Bill No. 417, and entitled, "A bill for an act to establish and maintain a Soldiers' and Sailors' Home in the state of Illinois," etc., etc. Said act was amended and passed, becoming a law by approval of Gov. Oglesby, June 26, 1885.

Under the provisions of this law Governor Oglesby appointed as trustees General Daniel Dustin, of Sycamore, Colonel L. T. Dickason, of Danville, and Major J. C. Rowland, of Quincy; said trustees organized by electing General Dustin, president, and Major Rowland, secretary; subsequently Colonel L. W. Shepherd, of Springfield, was made secretary.

This board of trustees by their proceedings have proven themselves to be incompetent, inattentive, or worse; their bad management has already damaged the institution to the extent of several thousand dollars, and unless a radical change is made the institution will soon become a public scandal.

In awarding contracts their action was so manifestly unfair as to attract public attention and condemnation, the work of construction and preparation for occupancy—now going on—is of such an inferior character and in such direct violation of the contracts as to perpetrate a fraud upon the state and a permanent injury to the institution.

The Senate of Illinois should not confirm the appointment of these trustees without first ordering an investigation, and should a committee be appointed with proper powers to make such an investigation I hold myself ready to make good the above charges.

S. M. RANDOLPH, Architect,
51 Lakeside building, Chicago, Ill.

This was followed by the summary discharge of the architect, and the subsequent statement referred to before the State Association of Architects, they unanimously agreeing that the matter should be investigated.

WE do not intend, at this time, to go into the merits or demerits of the case, because this cannot be done with intelligence until an investigation has taken place, and all the facts exposed on both sides, though the honorable action of the architect at the start, and the questionable way in which the contract was at that time awarded, is inclined to prejudice all fair-minded people in the architect's favor. Let this be as it may, when the matter was brought before the senate, when the names of the trustees came up for confirmation, the fact that these charges had been made was totally ignored, and in the house a motion to investigate the charges was voted down almost unanimously. In justice to the people of the state, the matter should receive attention, and we hope that it will again come up and give the people's representatives a chance to set themselves right before their constituents by a thorough and honest investigation. We take the general view, that the architectural profession, of which this architect is an accredited member, as well as the people, should receive this much consideration. It would be a dangerous precedent to establish, that charges made by architects against public officers should not be investigated.

The Disposal of Sewage of Isolated Country Houses.*

BY WILLIAM PAUL GERHARD, C. E., CONSULTING ENGINEER FOR SANITARY WORKS.

(Continued from Vol. VIII. No. 7.)

IF a stream of running water, either a brook, river, canal or tidal estuary is available, at not too great a distance, a single house may sometimes discharge its sewage into it, trusting to the dilution of the sewage and to the self-purification of the stream to render the sewage innocuous. This method, simple and convenient as it may appear, cannot be regarded as permissible in all cases. It is a method which, especially if the current is not rapid, and the volume of water in the stream not large, may cause serious annoyance and offense, and hence must be condemned as crude and imperfect; for, by pouring the filth into the nearest water course, we simply remove the evil from one place to another, without attempting to abate the nuisance. Again, it should be remembered, that what may be feasible and unobjectionable for a single house, is not practicable in the case of a number of adjoining isolated country houses. The pollution of creeks, rivers and streams must be avoided, especially of those water courses serving as a source of supply of potable water for villages and towns located along the banks of these streams, and from which canal boats or river craft draw their drinking and cooking water. Riparian dwellers always suffer by direct discharge of unpurified sewage into water courses. The watering of cattle, and washing and bathing in the river are thereby often rendered impossible; while more or less damage is done to fish culture, particularly where the sewage is discharged in a putrid condition. While it is a well-known fact that some kinds of fish feed on *fresh* sewage matter, others, particularly salmon and trout, appear to be very delicate, and usually suffer from the pollution of streams.

Channels with tidal flow, finally, should not receive sewage, for much of the solid matter discharged into them will repeatedly float up and down with the ebb and flow of the tide, instead of being at once removed. Offensive odors pervade the air, the banks will become defiled, the river beds silt up, and the channels gradually become obstructed.

6. Houses located at or near the seashore have, sometimes, no other available outlet for the discharge of their sewage than the ocean; but, although at first blush a ready means of getting rid of sewage, such a discharge is seldom permissible. Experience has demonstrated the unpleasant fact that floating sewage matter, discharged into the sea, may return to the shore with the tide, for through the action of eddies, currents, winds and waves. The sandy beaches become polluted, and the damage inflicted may seriously interfere with the use of the beach for bathing or recreation purposes. The direct discharge into the sea is only practicable where the sewage outfall from houses on the cliffs or near the beach is carried far out into deep water, and all sewage matter carried away by some strong currents setting in at right angles to the sewage outfall, or about parallel to the line of the beach.

7. It is obvious, therefore, that in the majority of instances, house sewage cannot be directly admitted into water courses or streams of any kind, nor into the sea, without creating a nuisance to sight, smell, or a danger to health. As far as practicable it should first be purified by removing the suspended impurities, and at least a part of the matters in solution. The purification may be effected by various methods, such as artificial filtration, chemical treatment, or by the application of sewage to land. After being purified by mechanical or chemical processes, sewage can sometimes be admitted directly into streams, in other cases, however, it becomes desirable that it be further purified or utilized on land.

I shall not stop to consider the question of artificial filterbeds, for, to my knowledge, such a system has never been used in the United States, in connection with the sewage from houses. I desire only to refer to a very ingenious mechanical filter, invented in England, but recently introduced into this country. It is known as the Farquhar-Oldham filter. The chief characteristic of this machine is the revolving cutter, which is so arranged that whenever the surface of the filtering medium clogs up with sewage sludge, it can be removed by said cutter in a few moments, whereby practically a new filter is established. This operation may be repeated as often as found necessary. While I have not personally made use of this filter for purifying the sewage from isolated country houses, I understand that it is in successful use at a country house at Seabright, New Jersey, and elsewhere. Wherever no system of sewage purification by application to land is possible, I believe this method will form a successful solution of the problem, although many will hesitate to adopt it, owing to its cost. The best filtering material for such apparatus is sawdust, which, when removed, can be readily utilized, to fire up the boilers needed for the sewage pumps.

8. Sewage from isolated country houses may be purified on the premises by chemical treatment. By this method the suspended and a part of

the dissolved impurities are precipitated by means of chemicals. Quite a large number of chemical processes have been invented, but none of them have attained any very extensive use. One of the most common processes consists in the addition of milk of lime to sewage. Much more effective than this are solutions of sulphate of alumina, or of perchloride of iron. Such chemical precipitation, while not accomplishing a very thorough purification, removes the impurities to such an extent as to permit a discharge into a tidal river or a large stream. Occasionally, however, as stated above, the clarified liquid is applied to land for further rarification.

In selecting a precipitant, preference should be given to one which accomplishes the process of subsidence with rapidity; at the same time it should be remembered, in choosing a precipitant, that it should produce a sludge of minimum bulk with maximum amount of solid impurities. In both respects, milk of lime is inferior to the other chemicals mentioned above.

A difficulty adhering to all chemical precipitation processes is the disposal of the sewage sludge. It usually contains, after precipitation, from 90 to 95 per cent of water, and unless the latter is removed it soon decomposes and becomes offensive. It has been suggested to evaporate this water by artificial heat, but such a process is expensive. Others have proposed the separation of the liquid matter from the solid in centrifugal machines. In some instances sludge is pumped directly from the precipitation tanks to land, where it is left exposed to the air, and when comparatively dry is dug into the ground. In some patented processes, such chemicals are added as enable the manufacture of brick or of cement from the sludge. More recently, powerful filter-presses have been used, which offer great advantages. By means of these the sludge is quickly pressed into cakes, which may be sold as manure to farmers, and not being bulky, enable a better transportation for long distances.

Chemical treatment must sometimes be adopted where land is not available for purification purposes, or where its high price precludes any efforts to obtain an area sufficiently large for irrigation. It may, at times, become necessary to resort to it, where the soil is underlaid with rocks. Again chemical precipitation may be combined with the application of sewage to land, in which case a much smaller irrigation or filtration area is sufficient. But all this refers more to the sewage from large institutions or from villages or towns.

Chemical treatment is not well adapted to single, isolated dwellings. The process implies the construction of tanks, the provision of suitable chemicals, the careful and thorough mixing of the sewage with the chemicals, all of which calls for considerable expense. Apart from this consideration, such a manipulation of sewage is not desirable on the premises, and in the vicinity of dwelling-houses.

It may be said in general, that whatever the chemical treatment may be, it will be wise not to have too much faith in the realization of a large commercial profit from the sewage treatment. Far better to make the ultimate purification of the sewage the chief end in view. It is also well to remember that in certain chemical processes, the effluent water is of such a character that, if discharged into brooks or rivers, it may kill fish and cause an injury to fish-culture. Chloride of lime is particularly objectionable. Sulphurous and hydrochloric acids are also said to be very hurtful.

9. Wherever a sufficient area of land is available, and the lay out of the land and the character of the soil are favorable, sewage may be disposed of, and purified on the premises by applying it to the land. Generally speaking, the application of sewage to land forms the best solution of the problem of sewage disposal. Not that it enables us to derive much profit from its utilization—this should always be a secondary consideration, in the case of larger institutions or towns not less than in the case of single houses—but by applying sewage to land it is always possible to effect its purification to such an extent as to avoid the usual fouling of surface or subterranean water courses. While chemical precipitation and mechanical filtration may be considered *artificial* processes, the purification of sewage by the soil is a natural process, completing one of the constant rounds or circulations going on in Nature. The water on the globe furnishes an example of such a circulation going on forever. Arising as a vapor from the ocean, and from large exposed surfaces of flowing water, it is carried along in the upper strata of the atmosphere by currents of air, and forms clouds, from which it is again precipitated upon the surface of the earth in the form of rain, snow, hail, or dew. A part of this storm water is immediately evaporated and returns to the clouds, another part flows off on the surface forming successively springs, brooks, rivers, streams—all flowing toward the great ocean, while a third part soaks into the ground, and is partially absorbed by vegetation, and partly forms underground streams of water with an inclination toward some stream, or else forms springs, which finally come out at the surface.

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(To be continued.)

Building Stones.*

BY WILLIAM B. LORD.

(Continued.)

BUILDING stones are geologically classed, granite, sandstone and limestone. Each formation is generally known, but sometimes a limestone is so near a sandstone in formation, as to be difficult to distinguish, and vice versa. At least two-thirds of all known elements exist in granite. Its principal components are quartz and feldspar. Quartz is the crystalline form of silica. It is subject to many variations in form and appearance, but none in composition, and is the cementing material of granite. Quartz always contains pores partially filled with fluids, which expand and explode when heated, thereby disintegrating granite. For this reason granite is not fireproof. Feldspar is very complex in composition, and its variations are the characteristics of color and durability, so its consideration is the most important element of study in granite. The white variety of soda feldspar is the most durable, although the columns and pilasters of the porch of the First National Bank is an example of a very handsome and durable red. They came from St. George, New Brunswick.

Mica appears in two colors, black and white, in all granites. It is an element of weakness, does not readily polish, nor retain a polish, because it is too soft, and therefore, if in abundance, is objectionable for polished surfaces; it has a parallel cleavage. If hornblende takes the place of mica, the granite is called syenite, and is generally finer in grain, as this mineral exists in a granular form; its colors are white, black and green. It polishes easily and retains the polish, and can be readily distinguished from pyroxene, although similar in appearance, by the pyroxene being brittle, and pitting in a polished surface, and from mica, by cleavage and hardness. If its color is a deep brown, decomposition has set in. Hornblende granites are classed among the best.

The remainder of the constituents (except the oxides of iron which I have referred to) are microscopic and of no particular value as a distinguishing feature. Very little syenite is quarried, although many excellent varieties are awaiting use. A hornblende syenite will stand a very severe fire test, because it contains but a small percentage of quartz.

Granites are subject to disintegration by chemical decomposition of the feldspar. It is principally the potash spar which changes by the action of impregnated atmosphere. In general, fine-grained granites are the best for building purposes.

When quartz is in excess the granite is difficult to dress. When potash spar is in excess, and in large crystals, speedy disintegration is to be looked for, and when mica is in excess, the stone has a tendency to exfoliate.

Gneiss is stratified granite. Its constituents are about the same as granite. It contains an abundance of mica, which lie in parallel planes. It is a beautiful, durable and readily worked and carved building rock, has been used in many fine residence buildings in the East, and has withstood severe fires. We have one example of it: Mr. Hankins' residence on Michigan avenue, one under way for Mr. Counselman, and five projected. Mica schist is of the same structure and constituents as gneiss, but lacks the feldspar.

Porphyry presents a variety of colors, and is practically indestructible, but it is quarried and cut with difficulty.

Greenstone, a beautiful, durable and easily worked building stone, is a hydrosilicate of magnesia. The green color, due to a small percentage of chromium oxide. It is principally used in ashlar, as it is only quarried in small pieces.

Sandstones are composed of grains of sand cemented together with either silica, carbonate of lime, or an oxide of iron. The texture varies from very fine to very coarse, and the many colors are due to the oxides of iron. If the cement is silica, the stone is light-colored and generally hard and durable. When carbonate of lime is the cement, the stone will soon crumble if soft; and if hard may prove very durable, in localities free from an acid atmosphere.

In a sandstone the fracture should be bright, clear and sharp, and the grains of fairly uniform size—not particular as to the size—and well cemented together. The appearance of earthy matter (noticed by dull color) is an evidence of weakness and poor weathering. Iron pyrites closely watch for. Variegated stones are not reliable, as they contain soft spots. Sandstones having the iron cement in the anhydrous sesqui-oxide state present a decided red or brown color, which are points in their favor for use and durability, and likely not be effected by exposure. Such a stone, with the other attributes necessary, is a very durable one. It is desirable in all sandstones to expose them for a time before use, as such stones as are fit for use are strengthened by the cement setting; and the treacherous blocks will show their defects. This will be objected to because the stones freshly quarried are softer and more readily dressed, but should be insisted on in a soft stone. See that the color does not wash out or fade.

Sandstones containing an iron oxide as a cement are generally preferable, as their dark, rich red or brown color is in their favor. Most of them work well, especially those of the triassic period; for instance, the Connecticut brown sandstone and some portions of the quarries of the Potomac red sandstone.

The Connecticut brown sandstone has a tendency to split, and if care is exercised in placing this stone on its bed, and not using it for projections, platforms and steps, or exercising caution in selection for these purposes, better results can be arrived at than are shown in some of our handsome fronts. The Potomac red sandstone is fine, close grained, homogeneous, varying in color in different parts of the quarries, from a red to a reddish brown, and never presenting a mottled appearance. This stone is peculiarly adapted for platforms and steps, and examples can be shown of its excellent weathering and evenness of color in buildings. Aluminum, showing clay, enters largely into the composition of the Long Meadow

brownstone, of which the walls of the new Field building are built. As clay is a free absorbent of moisture, disintegration is sure to occur in, and frost will exfoliate a stone of this description. The carboniferous period produces a brown sandstone, an example coming from near Carbondale, Ill. This is an excellent stone, but not of a decided enough color to rank among the most desirable building stones. A new quarry of this stone has lately been opened, a short distance south of Carbondale, which promises to be of a desirable brown color. The products of the pottsdam period, for instance, the Vert Island, are hard to work and very often run into quartz.

Iron pyrites should be thoroughly searched for, as they change the color by decomposition and absorption and injure the beauty of many fine buildings with rust-colored spots. Stains from oxide of iron, iron pyrites and petroleum are readily noticed in many sandstones, especially in those from Ohio. Past experience with such stones warns us that if stains exist, the stone should be thoroughly examined and the objectionable portions removed. An excellent example of the rapid decay of an Ohio sandstone containing oxides and sulphates of iron, and petroleum, is the church at the northeast corner of Throop and Adams streets. A good sandstone is close grained, uniform in color and texture and free from stains. The greater the amount of moisture absorbed by a sandstone and the smaller its pores, the greater will be the disintegrating effect of the frost, as the frost will have a better chance to force the particles apart.

A sandstone weighing less than 130 pounds per cubic foot, absorbing more than five per cent of its weight of water in twenty-four hours, and effervescing with acid, thereby showing a carbonate of lime cement, may be doubted for durability. Close-grained, soft sandstones absorb water and freeze in the winter, which renders them hard to work and brittle. Among the many varieties of sandstone in use, the Pennsylvania, New York State and North River bluestone, all of the same formation, may be mentioned. It is a fine, compact, massive stone; color, dark bluish-gray, will not scale or crumble. The expense of dressing is more than repaid by the handsome and substantial appearance. It is much favored in the East, and will make an excellent flagging as well as a building stone. The Ohio sandstones have been freely used in Chicago, but now you will only occasionally notice their use. Their reputation was injured by not selecting the stone. The Berea stone is filled with little specks of brown oxide. When this stone is separated from portions containing sulphide of iron, etc., it makes a good building stone.

The Amherst stone is a light, uniform, durable color, as the rock is above drainage, and has proven to be one of the most promising in regard to durability, of the sandstones in use. Its colors are buff and blue, the buff overlying the blue.

The Sunbury blue freestone is uniform in grain and color and free from iron stains. Sixty years of exposure has not marred the lines of carving, and shows an excellent resistance to wear.

About twenty-five miles from Des Moines, in Iowa, lies massive, unstratified and above drainage, a quarry of a most singular mottled sandstone,—red, white and bright yellow. A portion of this quarry is a bright red, and not mottled. It is certainly a very odd stone and easily worked.

Carbonate of lime is the principal constituent of limestone.

If carbonate of magnesia forms a portion up to twenty per cent it is called magnesian limestone, and is used only for rubble. Magnesian carbonate has the property of absorbing nitrogen and carbonic acid from the atmosphere to a higher degree than calcium carbonate; therefore limestones containing magnesian carbonate are less durable than pure calcareous limestones, and a more or less disintegration must be expected. If more than thirty per cent of carbonate of magnesia exists, it is called a dolomite; and if capable of taking a high polish it is called marble. The nearer the magnesian limestone is to a dolomite the better stone it is; and a dolomite containing forty per cent of carbonate of magnesia and five per cent of silica, or more, makes a good building stone, as both of the crystals are homogeneously crystallized together, to be inseparable by mechanical means. Our Lamont and Joliet dolomites were much used for both building and flagging. Because of their generally poor weathering qualities, the oolitic limestones are fast superseding them for fronts, and I hope to see the oolitic stone in demand for flagging, as it is a superior stone for that purpose. At one period much of this Joliet and Lamont stone was used for fronts, but experience has taught us that more suitable building material can be procured for that purpose. The same defect in the stone, that is, a yellow stain and shaling, shows in the quarry as it does in the building, and should have been taken advantage of before using the stone.

In a very short time this stone requires a coating of paint. The best quality of this stone is free of earthy matter, white, or blue-gray, in color, containing but little of oxide of iron, free from flint, and is taken from between the laminations.

In a limestone see that it is compact and homogeneous and not too coarsely crystalline in structure, and free from a dull, earthy appearance, oxides of iron, iron pyrites and carbonaceous matter.

The sulphuric acid of the atmosphere converts the carbonate in a magnesian limestone to the sulphate of magnesia (Epsom salts), which is washed out by rain and stains the stone; this is noticed in many of our brick buildings with limestone trimmings.

Limestones were formed by deposition of organic remains, or chemical precipitates from sea water. In the shell limestones of Florida the fragments are plainly seen, lightly cemented by the same material. In the other limestones the shells, fossils and carbonaceous matter are almost or altogether obliterated through metamorphism (heat and pressure), and assume a partial or perfect crystalline form. The white and blue marbles of Rutland, Vermont, are examples of crystalline, and the red mottled and black marbles of Tennessee, are partially crystalline. The most durable marbles are compact, homogeneous in structure, and not too coarsely crystalline, and of a blue or gray color. I noticed in Philadelphia that a local blue-veined marble is much used, and shows excellent weathering after many years of exposure for building purposes. The variegated marbles are much used for interior work because of variety of colors.

* Paper read before the Chicago Architectural Sketch Club, December 6, 1886, illustrated by specimens from the rocks, showing natural formations referred to. Revised by the author for THE INLAND ARCHITECT.

The Kasota stone is a ferruginous, silicious dolomite; the pink color due to retention of percolating oxidized iron waters.

Iron pyrites is a common impurity of most all limestone formations. To the various oxides of iron is attributed the colors found in limestones, marbles and dolomites, except blue or black. These colors are due to carbonaceous matter derived from decomposition of plants, etc., in the waters in which the stones were originally deposited. A quarry of limestone in one of our suburbs contains petroleum thoroughly impregnated through it, which exudates after a short exposure to the air and forms an unsightly covering to the stone. It is with difficulty prepared for the wall, as the stone very often breaks while being cut. When we have so many beautiful, cheap and durable stones for building, it is singular to me that this stone should be selected. It is very well suited for rustic work.

The oolitic limestones of Indiana were formed by pulverizing the remains of marine shells, corals, etc., to the condition of a fine sand. The soluble impurities were washed away, and the insoluble residue reunited into a solid rock by a cement of carbonate of lime.

Its formation in the quarry is homogeneous, massive and solid, generally about forty feet thick, not stratified with the clay partings that exist in our limestone quarries, and with no well defined cleavage. All the samples of this stone show from 95 to 98 per cent, a rare degree of purity, of carbonate of lime, which is indestructible by ordinary atmospheric influences, free from acids, while ferric oxide and alumina, to which most perishable stones owe their failure, here occur only less than one per cent. It weighs about 150 pounds per cubic foot, and ratio of absorption 1 to 30. In some of the quarries the stone is fossiliferous; in others soft spots abound and the texture is not close; so for these reasons care should be exercised in selection. The perfect unity of the particles of the better qualities of this stone renders it quite elastic, producing a clear, metallic ring, which is a distinguishing feature, and adapts it without cleavage or disintegration to our changeable climate. Its colors are pure white, and shades of buff and blue. The blue lies under the buff and is a harder stone. The facility of working this stone, both by hand and machinery, and its strength and durability makes it desirable for architectural purposes, where a light-colored stone is desired.

When using oolitic limestone, set the stone in lime mortar and not cement, for the reason that good lime mortar is generally free from the impurities—iron oxide, magnesia, gypsum, potash, soda, etc.—which invariably stain the stone, and are found in most all of the cements in use.

Another advantage in the use of lime mortar is in the cost, being much less than cement and answering the purpose equally as well. Although it has not had the test of time to thoroughly prove its staying qualities in various climatic situations, each year of exposure of the better grade of this stone is accumulating the evidence shown in the quarries that it is a most excellent building material, and that its adoption will not prove an expensive experiment, as was the case with our local limestones.

During my investigations of the relative value of the many kinds of building stones, I have been surprised at the disposition of many to choose a stone on account of color and cost, regardless of durability.

The following points may be of value: If a new stone is presented, compare it with stones of the same kind which are known to have been exposed for a long period. Carefully observe the results of actual construction of various stones, after time is allowed for weathering. Examine the weathering of the stone in its natural deposit, if the quantity to be used will warrant the time to visit the quarry and if possible use stone which lies above drainage.

I sincerely hope that the points embodied in this paper will lead you to a knowledge of the stone you are importuned to use, and cause a choice, irrespective of the slightly increased cost, of the better grades of building stones.

Our Illustrations.

Fourth street Baptist church, Louisville. H. Wolters, architect.

Iowa state capitol building, completed by W. F. Hackney, architect.

Alterations in a 13-foot house, for W. L. Davis, Cincinnati. Wm. Martin Aiken, architect.

Dormitory building, Southern Baptist Theological Seminary, Louisville, Ky. McDonald Bros., architects.

Design for residence of brick and terra-cotta with red tile roof. Treat & Foltz, architects. The etching is from a pencil sketch.

Executed design of Home for Lady Students, Oberlin College, Ohio. Frank O. Weary and G. W. Kramer, architects, Akron, Ohio.

Residence for C. S. Hutchinson, Prairie avenue, Chicago. The stone used will be Colorado pinkstone, and all details will be delicate in form.

Mercantile building for Francis P. Owings, Fifth avenue, Chicago. O. J. Pierce, architect. This building occupies an area of 64 feet front by 88 feet deep, and is eight stories in height above cellar. It is divided into two distinct buildings, by a heavy wall, from foundations to coping above roof, and the stores and floors above are entirely unobstructed by columns. Two freight and one passenger elevator, fireproof vaults, steam heating, etc., complete. The front is of marble, stone and iron, and the saracenic design marks something of an innovation in Chicago street architecture. The cost was about \$80,000.

Obituary.

MR. B. R. HAWLEY, well known to all architects and builders as the manufacturer of laundry dryers and conveyors and the patentee of Hawley's warming and ventilating system, died early in January, at his residence in Chicago. At five o'clock he was found in his office in the Adams Express building by Architect Van Brunt, of Kansas City, who called to see him on business. He was lying upon a lounge, unconscious, evidently suffering from an apoplectic shock. He was conveyed to his home, where he died at half-past nine.

Association of Ohio Architects.*

THE annual meeting of the association convened at Cincinnati, in the parlors of the Burnet House, January 20, about twenty-five members being present. The convention was called to order by President George W. Rapp, who addressed the assembly as follows:

Gentlemen of the convention and friends,—I regret very much that Mayor Smith has been obliged to go to Columbus last night on some unavoidable business, and will not be able to deliver the address of welcome, which no doubt would have added much to make this meeting interesting.

It again becomes my pleasant duty, on behalf of the Cincinnati Chapter of Architects, to bid you a most hearty welcome to our city, and trust that our attempts at entertaining you gentlemen will be such that when you leave us you will carry with you only the pleasantest remembrances of this third semi-annual convention.

Again we are assembled here in a fraternal manner, to consider matters of interest and for the general welfare of the "craft." I am glad to see such a large attendance, and hope that every member will remain until we shall have completed our labors. One year ago some of us met as strangers to organize this association; today we meet with familiar faces and with the friendliest feelings for one another.

On your rambles about our city you will notice that Cincinnati is taking rapid strides to bring it upon an equality with other large cities. You will notice the remarkable improvements that have been partially made in our streets; our court house has just been completed; the new art school and chamber of commerce are in the course of erection, the latter to cost over \$500,000. Many fine business houses and dwellings have been erected here during the past year, and we are now about to erect a million dollar city hall and an armory building, of which we have been in need for a long time. Since the completion of our Walnut hills cable road there have been two more companies organized to build cable lines to other hilltops, on which work has been already commenced, and two others are contemplated to our western suburbs, which will open out new fields for the application of the skill of our local members. We have organized a permanent building exhibit, on the plan of the one in Chicago, which will be a benefit to all visiting architects.

We have also a technical school or manual training school just organized, but which, I am sorry to say, is not as yet sufficiently endowed to offer much inducement to scholars. What we ought to have in this city is a technological institute on as grand a scale as the one in Boston, which has been of material benefit in the advancement of architecture in this country. As Cincinnati is so centrally located and has so many other inducements to offer for the attraction of pupils from all parts of the country, I think it requires but a suggestion on the part of some of our local members to some of our great philanthropists, who have already done so much for our city, and who, if they knew the pressing need for such an institution, would certainly endow an institute of technology, such as would be the pride of Cincinnati and the Buckeye State.

I would like to say a few words in regard to the building season of last year and the coming season. You have, perhaps, all started out at the opening of last year's season with brilliant prospects of a good year's work, only to be disappointed, owing to the inference caused by strikes. This deplorable condition of affairs we will probably experience again this year, in spite of the prospects for a busy season being much poorer than last year. I would, therefore, suggest that we discuss this matter thoroughly, and pass suitable resolutions, cautioning the representatives of organized labor, to let at least one year pass by without any interference on their part, as by so doing, I think they would improve their own condition at the end of this year as well as ours.

Among our local members the subject of licensing architects has been agitated to a considerable extent, and I hope that at this meeting the proposed law as formulated by the Western Association of Architects, will be thoroughly discussed, and the same be put in proper shape for presentation to the legislature.

Our Cincinnati Chapter has also been busy for the last few months revising the proposed law for regulating the construction of building in Cincinnati, and for appointing an inspector. I have been informed that the architects and builders of Cleveland are anxious to adopt a similar law for their city. As our law is framed to meet the wants of our city only, it will, therefore, not be necessary to bring it up for open discussion at this meeting. A similar law can hereafter be passed suitable to the wants of such cities as Cleveland, Columbus, and Toledo.

I have had occasion to visit the larger cities of this state during the last year, and I find that the style of building in these cities has improved wonderfully, especially in Cleveland, and I hope the next convention will be held in the latter place, as there is a good deal to be seen there that is of interest to the profession.

Our meetings are made very attractive by the display of architectural drawings.

When you look about this room and see representations of the good work done by some of your members, you cannot but feel proud of this association, comprising among its members most of the prominent architects of the state. I myself shall ever feel proud of having been honored with the presidency of such an association. (Applause.)

The President: The minutes of the last meeting having been published in the INLAND ARCHITECT, and having probably been read by all the members, I think the reading of them can be dispensed with, if there are no objections.

Reading of the minutes dispensed with.

Report of the treasurer, H. C. Lindsay: Money received, \$150; money paid out, \$72.83; money on hand, \$77.17.

The President: I think it will be proper for the secretary to call the roll of members.

Mr. Forbush called the roll, and the following members were found to be present: G. W. Kramer, F. O. Weary, Akron; Charles B. Cook, Chillicothe; W. M. Aiken, Edwin Anderson, Edwin Buddemeyer, Charles Crapsey, S. E. Des Jardins, Gustav W. Drach, W. R. Forbush, Geo. W. Rapp, T. A. Richter, Emil G. Rueckert, Cincinnati; F. C. Bate, F. S. Barnum, C. F. Schwienfurth, Cleveland; Jul. A. Kremer, C. A. Stribling, J. W. Yost, Columbus; C. I. Williams, Dayton; H. C. Lindsay, Zanesville.

The entire membership of the Association of Ohio Architects is as follows:

Akron: G. W. Kramer and F. O. Weary. Alliance: Guy Tilden. Chillicothe: Charles B. Cook and J. F. Cook. Cincinnati: W. M. Aiken, Edwin Anderson, Edwin Buddemeyer, Charles Crapsey, S. E. Des Jardins, Gustav Drach, Walter R. Forbush, W. W. Franklin, S. Hannaford, J. W. McLaughlin, A. C. Nash, L. F. Plympton, J. S. Trobridge, G. W. Rapp, T. A. Richler, E. G. Rueckert, M. Rumbaugh, D. S. Schureman, H. E. Siter, O. C. Smith and L. Green. Cleveland: C. O. Arey, F. C. Bate, J. M. Blackburn, F. A. Coburn, F. S. Barnum, F. E. Cudell, C. F. Schwienfurth, L. T. Schofield and J. N. Richardson. Columbus: J. T. Harris, J. A. Kremer, H. A. Linthwaite, E. T. Terrell, G. H. Maetzel, J. W. Yost, C. A. Stribling, J. M. Freese, S. J. Hall, C. E. Morris and E. W. Hart. Dayton: S. R. Burns, Luther Peters and C. I. Williams. Hamilton: M. Reutti. Toledo: E. O. Fallis, Bernard Becker and N. B. Bacon. Youngstown: W. B. Ellis, A. Kanengeiser, C. H. Owsley Herman Kling. Tiffin: Y. K. Hewitt. Zanesville: H. C. Lindsay.

The President: As the by-laws call for the payment of dues before every regular meeting, we will now take a ten minutes' recess for that purpose. There will also be a meeting of the Executive Committee, to consider the names of new applicants, if there are any to propose. The constitution is also ready to be signed by the members.

* Official report, revised by the Board of Directors for THE INLAND ARCHITECT.

The meeting being again called to order the president called for the report of the Executive Committee.

Members of the Association of Ohio Architects:

Your committee has the honor to report as follows: Since the meeting in July last year we have had several meetings, at which the bills for expenses of last meeting were allowed and ordered paid.

We also found the statement of the treasurer for the year 1886 to be correct.

Mr. Oliver C. Smith having tendered his resignation as secretary of this association on account of his having selected Chicago for the future field of his labors, we have appointed Mr. Walter R. Forbush, secretary *pro tem*.

Another of our members, Mr. A. W. Hayward, has left Cincinnati and is now located at Wichita, Kansas.

No complaints of improper professional conduct have been referred to this committee, the one relating to the Longview asylum competition having been referred to a special committee of three which will report at this meeting. No requests for arbitration have been referred to this committee.

At today's meeting of the Executive Committee three new members, Mr. Cudell and Mr. Richardson, of Cleveland, and Mr. Green, of Cincinnati, have been elected. Mr. Cudell and Mr. Richardson's names had been omitted by mistake from the list of charter members, their letters of application having miscarried at the time of our last July meeting; so we will have to consider them as charter members, making in all fifty-seven charter members.

There are now twenty-one members from Cincinnati, seven from Cleveland, two from Chillicothe, one from Alliance, two from Akron, eleven from Columbus, three from Dayton, one from Hamilton, three from Toledo, four from Youngstown, one from Zanesville, one from Tiffin. Our association now consists of fifty-eight members, comprising most of the leading architects of the principal cities of the state.

Respectfully submitted,

(Signed)

GEORGE W. RAPP,
J. W. YOST,
CHARLES CRAPSEY,
FRANK O. WEARY,
JAMES W. McLAUGHLIN.
Executive Committee.

The report was accepted.

The President: We would now like to have the report of the Committee on Formation of Chapters.

Theodore A. Richter, chairman of the Cincinnati chapter, reported as follows:

To the Members of the Association of Ohio Architects.—The architects of Cincinnati assembled on Monday, April 5, 1886, in the rooms of the Builders' Exchange and successfully organized a branch of the Association of Ohio Architects, adopting the name "Cincinnati Chapter A. O. A." There are nineteen members, viz: W. M. Aiken, E. Anderson, E. Buddemeyer, C. Crapsey, S. E. Des Jardins, G. W. Drach, W. R. Forbush, W. W. Franklin, S. Hannaford, H. E. Hannaford, J. W. McLaughlin, L. Pickett, L. F. Plympton, G. W. Rapp, E. G. Rueckert, M. Rumbaugh, T. A. Richter, Jr., H. E. Seiter and J. S. Trowbridge. A. W. Hayward, a member, has gone to Wichita, Kan., to practice. The objects of this Association are to unite in fellowship the architects of Cincinnati, to combine their efforts so as to promote the artistic, scientific and practical efficiency of the profession, and to cultivate and encourage the study of kindred arts.

The following is some of the principal work of the association since its organization, viz:

All builders making a practice of furnishing to or making drawings for parties contemplating building, will be debarred from the privilege of making estimates in our office until they notify the secretary, individually, in writing, stating that they would discontinue the practice.

The House Bill 307, offered by Dr. Graydon, better known as the bill to regulate construction of buildings and to provide for the appointment of a building inspector, has been carefully read and revised, so it is now ready to be substituted for the original bill; same is in the hands of a printer now and will be sent to the legislature before February 3.

The Western Association of Architects' "Code of Competitions" has been urged upon the members of the Hamilton county delegation to be included in the bill before the legislature, authorizing the building of a new city hall for Cincinnati, whether the same will be adopted, regulating the competition, has not been made known to us.

The act to regulate the practice of architecture in the state of Ohio has been discussed, and it was decided to bring the matter before this convention of the Association of Ohio Architects with the indorsement of our association.

We trust that the work of the association in regard to the house bill, code of competitions and act regulating the practice of architecture be successful, and advise the different members of the Association of Ohio Architects to submit the same favorably to their county delegation. Respectfully submitted, THEODORE A. RICHTER.

Motion was made that this report be received and filed. Seconded. Carried.

The President: Cleveland is the next city. I will state that Mr. Scofield has been somewhat backward about attending these meetings. At the last meeting he was elected vice-president, and he is not here. I would be very glad to have some of the other members present state something in regard to Cleveland; whether there are any prospects of a chapter being formed there or not.

Mr. Barnum responded as follows:

Mr. President,—I have made some little effort to stir up some enthusiasm there, and tried to get other representatives of the architects of Cleveland to come down with us and attend the meeting, and two names have already been proposed for election, and they have already been accepted as members. They are both enthusiastic, and were too busy to come down. There has been some little talk about the formation of a chapter there, but as things stand at present there seems to be a feeling that it would not be a good thing, as none of us think there is anything to be gained by it, at least by the better class of architects; we are somewhat discouraged. At the same time Mr. Schwienfurth and myself would like to invite the members on our own responsibility to come to Cleveland for the next meeting. We have come down here to become better acquainted, and hear something to report to the rest of the architects, and see what effect that will have. I do not see that I can say anything further, but only wish we had a little more encouragement.

The President: What is to be done with this report from Cleveland?

The report was accepted.

Mr. Schwienfurth: I received a note which I have here from Mr. Weary, in which he says he would like to have all the Cleveland architects come down. We have quite a number of architects in Cleveland, and would like to have the next place of meeting there. Cleveland is a pretty good sort of a place. No one gave us authority to extend any hospitality, and we will do that on our own responsibility. We have done a little work in Cleveland that we are not ashamed of, and if you will come we will be glad to have you.

Mr. Rapp: On behalf of the association I extend you our thanks. It will have to be decided by a committee appointed for that purpose.

Reports from other chapters were called for, but the committees were not present.

The President: The next thing in order is the report of the Committee on Statutory Revision and the Law for Licensing Architects, Messrs. Yost, McLaughlin, Scofield, Harris, and Fallis.

Mr. Yost, chairman, reported as follows:

Your committee would beg leave to report that the question of passing a law licensing architects, as favored by the Western Association of Architects, has been presented to members of the legislature and is now under consideration. It is thought by some that under our constitution it cannot become a law. I believe, however, that upon a fuller examination it will not be found in conflict with the constitution.

There seem to be some objections to having it extend far enough to prevent private individuals from employing unlicensed architects on their own private work. Possibly for the present it will have to be limited to work of a public character.

I have called the attention of members of the legislature to some of our statutes in regard to letting contracts which are in conflict with each other, and have suggested that part of Section 3988 be repealed.

The bill requiring all material and labor bills to be paid upon the construction of buildings, is before the legislature, with what prospect I cannot say.

Respectfully submitted,

J. W. Yost, Chairman.

Mr. Schwienfurth: I see by the report of Mr. Yost that there is a matter he touches on that I have thought for some time ought to be amended. If my information is correct, the present laws of the State of Ohio require that all public contracts be let by separate bids, not only material but labor shall be let separately, and the cost paid. If this is the case, it is inconsistent; it cannot be done; we cannot allow bids that way. If it is possible I would like this committee to consider the matter, and do something in regard to it.

Mr. Yost: I would like to say that there is a conflict between sections 794 and 3988. Section 794 requires that in letting public contracts bids shall be received on each separate branch of mechanical work, and at the discretion of the authorities in charge the same bids for labor and material may be accepted. That is all right; that is just as it ought to be; if they want to do that let them do it. But section 3988 absolutely requires them to receive them and award them to each separately; that is, if one part of a certain bid is lower than another, it shall be awarded to that bid. This should be repealed. What we want is to have it so that bids can be received on labor and material separately, and leave it to the discretion of the authorities in charge to award it separately or to the same bidder. In section 794 they are absolutely required to advertise for bids on labor and material for the contract separately, and allow contractors of those separate branches to bid, and, if the separate branches are equal to the aggregate bids, they may award it to the separate; it allows them to separate them. But it is in section 3988 that we want to get rid of that part that refers to schoolhouses. If that is got rid of, it leaves it at the discretion of the authorities in charge to have these bids separated. It compels them to receive separate bids, but leaves them the privilege to award it to the same. So I think if we could have that repealed or changed there would be no conflict, and we would have one law for all public buildings.

Mr. Weary: I think we have a law for state buildings, one for county buildings, one for city buildings, one for corporations, and another for schoolhouses. Perhaps they all differ in some particulars, but they do not conflict. I speak of this only because I think the general law covers everything. There are some provisions where the law for city buildings is somewhat different from the others, but there is no conflict.

Mr. Yost: It is the conflict between sections 794 and 3988 that we want to get rid of. Right in the same connection, I want to say, that there is one provision in the law governing city buildings which I think it would be well to extend to the law governing all other buildings. The law is, that when bids are received for any public contract by the board of trustees or whoever it is that has charge of it, the contract must be awarded to the lowest responsible bidder, unless in their opinion it is better for the state not to do so, and then they must state their reasons in writing to the governor, or, I believe, to the secretary of state or attorney-general, and if given permission in writing, they may award it to some other than the lowest bidder. It would be well to have the provision in some section of our law, so that it should be awarded to the lowest and best bidder, and that would prevent incompetent persons from bidding, and would leave no chance for favoritism. It must say, "to the lowest and best bidder," or it would leave a chance for favoritism. The supreme court of Ohio decided in the Marion county case, that authorities have the right to discriminate, but they must have good reasons for so doing. This is a provision that I think should govern all buildings. The general law for municipalities requires it to go to the lowest bidder.

Mr. Weary: I think this point Mr. Yost has brought up is a very interesting one, and one we cannot discuss too much. A great many clients, when they have their work bid upon, look only to the amount of the bid. They are compelled to give it to the lowest bidder, and if it is through a mistake of the contractor, if he has omitted some things, that is not their fault; that is the fault of the contractor; they are not responsible for that, and through this mistake of the contractor, a better and more responsible party loses the work.

The President: We would like to hear from all the members present on this subject.

Mr. Cook: I would like to make a remark on that. I remember a party who got a contract because his bid was way down low, much lower than any of the other bids on the same work. When he came to fulfill the contract he found he had made a mistake in his estimate. Where he had to double he had forgotten to double, so that made his bid too low. He was able to show pretty clearly how the mistake was made, but I do not know whether he ever got any relief.

Mr. Weary: I have a case of the same kind in mind. A number of bids were received, all of them were reasonably near for the architect's estimate, but one of them was way down low. The party making the bid was not responsible. There was every reason that he was not a man to whom the contract should be awarded. He was neither willing, competent, nor honest, but his friends backed him and procured a bond for him. That was found not to be satisfactory. He immediately procured another, which was also not satisfactory. He immediately procured a third bond, and at last the contract was awarded to him. They did everything they could not to give it to him, but he was some \$20,000 lower than the others and so they were compelled to award it to him. He afterward found that he had made some mistakes, had omitted some things, and that was how his bid came to be so low. It left him in a terrible muddle, and they were put to a greater expense in the end, and it prevented better and more responsible parties from getting the contract.

Mr. Schwienfurth: I think if the architect would put his foot down and say that he would go just so far and allow only responsible parties to go in and bid it would be all right. I think if the architect would stand up for these little things now and then it would go a good ways. If people

make a contract they should be required to carry it out, and be made to pay for all their mistakes, and then they would be careful not to make them, and if they were not competent they would not bid.

Mr. Yost: The point referred to is this. In private work it is all right; they can accept what bids they want, but in public work, if the lowest bidder is not awarded the contract, he can go into court and get it, and the best way is to have the statute read so, that we should have no trouble about that.

Mr. Williams: I move that the committee be continued, and allowed to take such action as they see fit in regard to Section 3988. Motion carried.

The President: Now, here is an act in regard to the licensing of architects. The secretary will please read it aloud.

The secretary read the act, to regulate the practice of architecture, formulated at the St. Louis convention of the Western Association and printed in the proceedings of that convention, INLAND ARCHITECT for November, 1885.

The President: You have heard this law read; what is to be done with it; are there any changes to be made?

Mr. Crapsey: Has this law gone before the legislature?

Mr. Rapp: As I understand Mr. Yost it has been before some members of the legislature. We would like to have a general discussion of it.

Mr. Crapsey: Now, you say "the governor of this state shall appoint a board of examiners of architects, to be composed of five members, who shall have been engaged in the honorable practice of their profession at least ten years." Now, where are you going to get those five members, when they have not had a license "so to do, etc." First you are going to make it unlawful, and then you are going to appoint five members; now, where are you going to get them, to appoint? There seems to be something there not just right.

The President: I would like to ask Mr. Yost if the act has been put in the hands of the Legislative Committee as it is printed.

Mr. Yost: It was shown to some of the members of the legislature. It seems that some other professions have been making applications of the same kind, and it was suggested by some of the members to whom I gave it, that may be there ought to be some amendment in the statutes, and this ought to be taxed by the state as a business, and then the law could prescribe who could or could not practice, and I will know in a day or so what can be done. I do not think there is anything in the statutes that conflicts with it.

The President: Shall this be discussed section by section? We can have the discussion postponed until this afternoon.

Mr. Yost: I move that we postpone it, and let it be taken up section by section whenever we get ready for it.

The President: Then, if there is no objection, the discussion will be postponed until after dinner. The next report will be from the Committee on the Lien Law, Messrs. Harris, Linthwaite, and Kremer.

Mr. Stribling: I was speaking to Mr. Harris yesterday, and he said he thought there had been nothing done about it. He had the law drawn up by the attorneys. It would be passed, if possible, this season. It is very doubtful, however, if it will ever be passed.

Mr. Yost: On this subject I want to say that generally this seems to be the law, that where a laborer or a material man puts in a claim before the contractor is paid, he cannot file a lien upon the building for within a limited time—three or four months, I think. I am told by Mr. Harris and others that the intention of the proposed change is to do away with men going into a contract without having means or capabilities, and to put the business of building in responsible and honorable hands.

Mr. Forbush: I received a letter from Mr. Harris, saying he was not well, and would have to go home, but if he was better he would be here today; as he is not here I suppose he is no better. In regard to the lien law, as I understand it, is the owner responsible in case of the contractor failing to pay a sub-contractor for material and labor which he put into the building? Is he responsible only for the amount of the original contract or for the sub-contracts also?

Mr. Crapsey: There was a case decided where a material man furnished lumber to a building, and before the completion of the contract the client failed. I think it was a carpenter, and this man furnished lumber to the carpenter, and the owner advanced money to this carpenter to finish the job, and the material man and the lumber man filed their claims. The case came up for trial in our superior court. It was held that where money was advanced in good faith to finish a building it was right and proper; where a man advances money to finish a building he does not have to pay twice.

Mr. Yost: In regard to the advancement of money in good faith, that is all right and proper. The money may be all paid in advance, but when a man makes a written contract with a contractor not to pay him before a certain time, and then goes and pays him before that time, it is different. Proprietors should be very careful in the payment of moneys during the progress of their work to any party, beyond what they have contracted for. If they have to pay twice, it would tend to make them be more careful. We certainly have clients who seem ready to take advantage of everything to get their work done cheap, and they will allow the work to go to any incompetent man, and insist that the architect shall make that man do a good job, when he is not capable, and then they will grumble and make a great fuss because the architect can't do it. This law will make such characters as that, if they do that sort of thing, pay twice; for a man has no right to contract with a man to do something that he knows he can't do, and I think this change in the lien law is intended to right this. I have never seen the law myself, and only know what I have heard of it.

The President: My impression is this: As soon as the work of the main contractor is accepted by the owner, under our law, he has forty days to file a lien in case he does not get paid by the owner, and the sub-contractors have no right to file a lien unless they bring in a claim before the completion of the entire work. When work is let separately, each sub-contractor then becomes a principal contractor. Claims will have to be

brought in before his particular work is finished; but if they are not brought in before that work is accepted by the architect, then the material men have no right to file a claim against the owner. I think the law is in pretty good shape as it stands, and I do not think it should be meddled with. There has been some talk, I understand, about making this lien law cover architects' fees. Do you know anything about that?

Mr. Yost: There was a committee appointed last meeting to look after that, but I do not know that the committee has ever made any report.

Mr. Forbush: I would like to ask for information, if, when an architect has not been paid, does he not have the right to file a lien, the same as any other person connected with the building? I have heard it stated that he has, and I would like to have the opinion of any one here.

Mr. Yost: I have my doubts about that. The architect's services are of a professional character and cannot come under the head of labor.

Mr. Barnum: I was once building for a client, and before the building was completed the proprietors made an assignment. We consulted legal authorities in Cleveland, and they looked the subject up, and they were satisfied that we had a claim. We filed a lien, and we know that that lien has been received as a claim. The account has not yet been settled, but it has been set aside as a preferred claim. There were other claims entered against them, and one of the assignors came to us and wanted to make a settlement of fifteen per cent, and we told him that we had filed a lien, and he said he had nothing more to say to us, as our claim would probably be covered. The matter not being settled, I do not know whether the law will cover our case.

Mr. Crapsey: But all that don't go to prove that you have a lien. Whether it is really a lien upon that property is for the courts to decide, even if your clients are perfectly satisfied that it is a lien. You simply filed that to make your case stronger; but whether that would really in law be a lien is for the courts to decide, and you simply filed that to help you.

The President: This case of Mr. Barnum's is very important, as we may all meet with a similar case ourselves, and we would be very glad if Mr. Barnum will inform us as to the result.

Mr. Barnum: I shall do so with great pleasure.

Mr. Crapsey: Do you propose to carry it into court as a lien?

Mr. Barnum: Of course; we go in with the parties who furnish material and labor on it.

The President: I hope Mr. Barnum will make a test case of it, so that we will all have the benefit.

Are there any further suggestions to offer on this lien law; or will it be better to leave the balance of it until this afternoon?

Mr. Barnum: I move that this committee be instructed to see what can be done in regard to this, with power to act as they see fit.

Motion carried.

The President: We can now hear from the Committee on Incorporation, Mr. Yost and Mr. Weary.

Mr. Yost: I have no written report to make on the subject. There was some inquiry made on the matter of incorporating, and the first thing we found out was that we must have a location and a general office before we can become incorporated; that seems to be one of the requirements. I do not know that I have any further report to make than that. I am not clear as to what we gain by being incorporated beyond the privilege of suing and being sued, one of which is a gratification and the other the least expensive of the two. We could propose fixing some place in the State of Ohio as our general office, but we would have to have our secretary always at that one point. We have nothing further to report.

The President: At the last meeting a motion was made and carried, that this association be incorporated in the laws of Ohio. A committee was appointed for that purpose, and Mr. Yost got some of the papers that are necessary for incorporating. Now, if this action of the last meeting hold good, we would have to decide where would be the best location of this association. That is the stumbling-block that the committee met with.

Mr. Crapsey: I think it is best that at this time the association should not be incorporated; and, therefore, I move that the report be received, and the committee be discharged.

Motion carried.

The President: We have to hear from the Committee on Building Inspector Law, Committee on Longview Asylum Competition, new business, paper of Mr. Allison, paper from Mr. Yost, paper from Mr. Forbush, and others. For the benefit of those who must go away today, it will be well if we continue until we get through, and, if necessary, have an evening session. We may be able to get through this afternoon. It would be well to appoint a committee on nominations, to be ready to report this afternoon, and then take a recess.

Mr. Forbush: I move that a committee of three on nominations be appointed by the president.

The President: Perhaps it would be well to appoint two committees, and have two tickets. It would make the nominations more interesting.

Mr. Crapsey: We could have the one committee to nominate two tickets, and have the same committee appoint a place for our next meeting.

The President: That can be done.

Mr. Crapsey: I move to amend to that effect.

The President: Mr. Forbush, do you accept that as an amendment to your motion?

Mr. Forbush: Yes, sir. Motion seconded and carried.

Mr. Crapsey: I understand that we have an invitation from Cleveland to meet there six months from now, and I think it would be treating Cleveland with great disrespect not to accept it; and I know that, for myself, I am very anxious to go to Cleveland, and I move that the committee be instructed to decide on Cleveland as the next place of meeting. Motion seconded and carried.

The President: I appoint Messrs. Crapsey, Lindsay, and Schwienfurth as committee on nominations.

Mr. Schwienfurth: I move we take a recess until half-past two. Motion carried.

After an inspection of the drawings upon exhibition, the meeting was again called to order by the president, and the report of the Committee on State Law for Licensing Architects taken up. [As this bill is printed in the official report of the proceedings of the St. Louis convention, Western Association of Architects, December, 1885, edition INLAND ARCHITECT, and has been widely circulated by the Secretary, Western Association of Architects, it is omitted here.—Ed.] The report was read section by section, and discussed, the following changes being made:

The act is addressed to the General Assembly of the State of Ohio.

Section 1. Passed as read.

Section 2. Limited to thirty days, and "member of the faculty of" stricken out.

Section 3. Passed as read.

Section 4. Giving number of buildings submitted as *six*; the place of publication *Columbus*; "the board may issue," etc.

Section 5. Inserted "before or after graduation," "or apprentice" stricken out, and "three years" as term of service.

Sections 6, 7, 8, 9, 10 and 11, passed as read.

Section 12. Directed "fine to be paid into the general fund of the State of Ohio."

On motion of Mr. Crapsey, the act was adopted as a whole.

On motion, it was expressed as the sense of the assembly that the signatures of architects and property owners of the state should be secured and attached to the bill before presenting it to the legislature.

The President: Now we can again take up the report of the Committee on Statutory Revision.

Mr. Crapsey: That report was referred back to the committee this morning with power to act.

The President: Then the next in order is the report of the Committee on Building Inspector Law for Cincinnati.

Mr. Crapsey: I have no written report, and the association ought to be glad of it, for it would take a week to read it, and then you would know no more about it.

Mr. Crapsey reported as follows:

Something like a year ago the Builders' Exchange of Cincinnati appointed a committee to prepare a building law for the state of Ohio. That committee worked some six or eight months, and they prepared a code of building laws for the city of Cincinnati, and the bill went up to Columbus last winter, and was printed and laid on the desks of the several members. The chief objection to it was its length. Nobody seemed to take any interest in it. They did not want to read it, and they did not know anything about it. It never came to anything, and in the meantime the legislature adjourned, and the bill came back to Cincinnati in that shape, printed at the expense of the state. Then we were invited to take a hand in it, and this committee referred to by our president was appointed. That committee was called in about the time that they got down to that part of the law known as sanitary plumbing and engineering, and they sat in judgment on it. It took about a month to get through that part of it, and they made several changes, additions, and subtractions. They were instructed by the Builders' Exchange to go into the whole matter, but some of the members were getting pretty old, and some of them had families to support, and they did not care to devote the remainder of their lives or means to it. Now, that brings us down to the present time. Within the last six weeks the matter was again taken up by the Cincinnati chapter of the Ohio Association of Architects, and their chief endeavor was to cut it down, striking out of the original law some fourteen pages altogether, allowing for some additions. That has reduced the law to some thirty-two or thirty-three pages, and Dr. Graydon, one of our representatives of Hamilton county, has the bill in charge, and it is more than likely that it will be passed. It is now in the hands of the printers. A copy of it will be sent to the members of the Ohio Association if they so desire. The bill was framed to apply to Cincinnati only. Now, if Cleveland should want a building law they can take this, change it, fix it up to suit themselves, and they can go to the legislature without all the trouble of Cincinnati, and have the bill to suit themselves. That is all the committee has to report.

On motion, the report be received and filed.

The President: Next is the report of the Committee on Longview Asylum Competition, Messrs. Crapsey, Aiken, and Yost.

Mr. Yost: There is a minority report. I have the majority report. It is as follows:

CINCINNATI, January 20, 1887.

To the Association of Ohio Architects:

GENTLEMEN,—The committee appointed at the last convention to inquire into the matter of the conduct of the competition for the new buildings of the Longview Lunatic Asylum would respectfully report that on or about the day of 1886, the commissioners of Hamilton county published in the daily papers an advertisement inviting architects to submit bids for making the plans and specifications for certain additions to the Longview Lunatic Asylum. Some five or six architects received special written invitations; within a day or two after these invitations had been issued a meeting of the architects was called, and very largely attended, and at this meeting a paper was drawn up, gently reminding the commissioners that this way of employing an architect was both unusual and undignified, and not conducive to the best interests of either the architect or his client. The paper also stated that the services of any one of the signers to the paper could be had at the usual rate of five per centum upon the proposed cost of the work according to the accompanying schedule of the American Institute of Architects. This paper was signed by every resident member of the Ohio Association, as well as some who were not members.

Within ten days after this paper was signed, the commissioners received from four architects who had signed this paper, propositions to do the work for \$1,000 and upward, and the work was awarded and performed in accordance with these propositions and against the peace and dignity of this society in such cases made and provided. Your committee are satisfied, however, that there were certain mitigating circumstances which led these gentlemen to thus break faith with their brethren, and furthermore, your committee are convinced that actions like this tend to demoralize the organization and good being of our society, and in hope that occasion will never again require the appointment of a committee for a similar purpose.

Respectfully submitted,

J. W. YOST,
CHARLES CRAPSEY,
WM. MARTIN AIKEN.

Mr. Drach: I understand there is a minority report. We would like to hear it.

Mr. Crapsey: There is a minority report but it is not finished yet. I can submit it as far as it goes. I thought the majority report would be adopted unanimously, but I can give you as much as I have.

To the Association of Ohio Architects:

CINCINNATI, January 20, 1887.

GENTLEMEN,—The undersigned committee, appointed at the last semi-annual convention to examine into and report upon the matter of the late competition for the erection of additional buildings to the Longview Lunatic Asylum, desire, as a minority part of said committee, to enter a little more fully into the details and the whys and wherefores of the said competition than the majority report shows, and would therefore submit for your consideration that there can be no doubt but that another competition has been held, with the usual result of headache, headache, and purseache.

The committee find that the commissioners of Hamilton county, not knowing the dignity of the architectural profession, did, on or about the 15th day of January, of 1886, issue an invitation to the architects of Cincinnati to submit "bids" as to what they would make plans and specifications for certain additions to the Longview Lunatic Asylum for.

Whereupon the architects rose in their number and strength, and girded up their architectural loins, and said unto these benighted commissioners, "Go to, now, we are professional men, with the stamp of the Western Association upon our brows, and are we to be thus importuned to submit 'bids'?" We are not mechanics, seeing who can do the least work for the most money, nor are we of unsound mind and memory, and possible inhabitants of your proposed buildings; no, gentlemen, we are clothed in our right minds, and know whereof we speak when we say that five per centum of the cost of the buildings to be erected, to contain possible future generations of architects, is the lowest sum total at which you can obtain our valuable services; and thereupon was signed the protocol, binding each to the other, that thus it should be; but alas for human frailty, which did not seem to have been counted upon when the aforesaid protocol was signed, but which it seems that the commissioners counted very largely upon, for hardly was the ink dry upon the paper that contained the names of the said reputable architects, all members of the Ohio Association, when it seems that one member, at least, discovered that he was hard up for work, and must have some at any price, five per centum to the contrary notwithstanding; and it appears that just at this time, he and three others also, discovered that the commissioners were getting bids from architects, and each one was suspicious of the other, and so each says to himself, "Thou fool, why wilt thou eat the bread of idleness when there is a \$100,000 lunatic asylum laying around loose just waiting to be gobbled up. If I don't get it some one else will." So, upon consultation with the commissioners, of course, the discovery was made that other architects were about to submit "bids" for the work, and, of course, the commissioners made it very clear that this was not a new building, it was simply an addition to an old house, all the lines and levels of which were already established, and really all we, the commissioners, want is a draughtsman to carry out our ideas; there is nothing to design, no weights to compute, and there will be no superintendence; and talking on in this strain they readily found some four draughtsmen to submit offers (not bids,—perish the thought) to do the work all the way from \$1,000 to \$1,500, and, of course, the \$1,000 man got the job, and they lived happily ever afterward; and so ended the reading of the first lesson.

It is not in the hearts or minds of any one to recommend anything in the way of censure or complaint toward the four or five architectural draughtsmen who so gallantly came to the rescue of the commissioners in pulling this \$100,000 chestnut out of the fire; no, gentlemen, quite the reverse, we would rather recommend that some distinctive honor be placed upon them, for will not future architectural generations rise up and call them blessed for having done some little part in the raising up of so fine and comfortable a building, where the wicked Queen Anne, Colonial, and Norman styles will cease from troubling the weary architect in his endeavors after the unattainable? Will it not be in this building that he can find rest and repose from all the cares that architectural flesh is heir to? Where five per centum, and competitions, and brick and stone, and iron and wood will only be as nightmare, as a tale that is told, that once was, but will be no more forever. No, censure should not, and will not fall, except in the spirit of persecution, upon those who stand in the front rank and receive the fire of the adversary in the shape of \$100,000 buildings. If censure is to be attached to anyone, it should rather fall upon those who stand aloof from the bustle and smoke of the battle, and with folded hands smite themselves upon the breast, and are thankful that they are not like other men, but are double re-dipped, old style, extra coated and thoroughly prepared, and warranted to throw off any shower of \$100,000 buildings, no matter how posterity may howl because of their lack of public spirit. (Applause.)

CHAS. CRAPSEY,
WM. M. AIKEN,
J. W. YOST, } Committee.

The President: We have heard the two reports. What shall be done with them?

Mr. Drach: I move that the majority report be accepted and placed on file.

Mr. Schwienfurth: I move as an amendment that they both be placed on file. Motion as amended carried.

The President: Gentlemen, after hearing the report of this Committee on Competition, and, as every one of us has probably had a similar experience in his practice, I think you would all be glad to hear a paper read, which was presented at the last meeting of the American Institute of Architects in New York, by George A. Fredericks, of Baltimore, in which he treats on the ethics of architectural practice, and some of his personal experiences in competitions. If there is no objection I will read it, as I think it will be of benefit to every member of the profession, and would probably have a tendency to prevent improper practices in the future.

Mr. Fredericks' paper was received with marked attention, and the applause which ended the reading seemed to indicate the most thorough concurrence of all members in the sentiments expressed.

The President: Mr. Allison not being present with his paper, we would like to hear from Mr. Yost on competitions.

Mr. Yost read the following paper:

As Cincinnati is likely to be the scene of an important competition in the near future, a few words upon the subject of competitions may not be out of place.

It has been customary for architects to regard competitions as a great evil, and many refuse to enter them under any circumstances, but in spite of all efforts to abolish them, they still continue.

In the midst of our disappointment at our inability to drive the competition monster away, suppose for a moment we stop and take a good look at him, and see if we are really as much afraid of him as we imagined, and whether his teeth are really as sharp as they look to be, and whether, after all, we are really in earnest in wanting no more competitions.

What is their object? First, I venture, to obtain the best possible design. Second, to give all who desire, an equal footing to secure important work.

That better designs will be obtained through competition will only be true when those who enter the competition are fairly able to do the work sought. When sufficient inducement is offered to enlist the efforts of the best talent, competitions will, as a rule, furnish an opportunity of selecting a better design than will be secured by the employment of any one architect.

Because the wisest man in Christendom will be mistaken more than half the time if he undertakes to guess who, of a number of architects will present the most satisfactory design for any particular building, supposing that each is reasonably well qualified to design it, and it frequently occurs that someone who was not thought of as a winning quantity, hits upon an idea which develops into a better design than even older and better architects present.

But if all the competitors are unable to design the building decently, the results of the competition will prove far less satisfactory than if someone of proper ability had been selected without any contest, and any man, or any set of men, who expect to secure a good plan by means of a competition, when they have taken no pains to attract the efforts of the very men they believe to be most competent to do the work, ought to be sent to Barnum as specimens of natural curiosity not spoken of in the books, and if, in the profundness of their stupidity, they decide that if they don't get a good design by a newspaper advertisement, such as most of them are, that it is not their fault, they ought to go and learn wisdom from the ostrich who sticks his head in the sand and then imagines the balance of him cannot be seen.

As to the second. In full view of our time-honored opposition to competitions, I ask, Are we quite willing to dispense with them? Are we fully agreed that public work shall be controlled by those who are able to marshal the greatest amount of personal influence and those who have the widest reputation? Is there, after all, not just enough of American in us to make us want at least a chance to offer a plan for such public work as we may feel interested in?

Take as an example a late competition here. Were the architects of Cincinnati quite reconciled to the idea of having anyone of their number selected as architect of the Chamber of Commerce building, without any of the others having a hearing?

The answer to these questions will, I think, establish the fact that we do not agree to entirely dispense with competitions, nor do I know of its ever having been done in any other country.

Is it competitions we are opposed to, or is it the method of conducting them?

I am willing to say that I regard properly conducted competitions as a good rather than an evil, to both architects and public. I do not think it is an evil for us to be

invited to present ideas of a building in competition with others. I do not regard it as unprofessional, undignified or wrong for several architects to submit designs for the same building.

It is the pernicious methods of conducting them which constitute the evil to be eradicated, and not the competitions themselves.

This brings me to consider some of the objectionable methods, and I am willing to admit that not all the objectionable features of the average competition can be abolished at once. But there has been much improvement in the past few years, and year by year the public is becoming more and more enlightened upon the subject. The public wants them for its own benefit, and it is learning rapidly that what is fairest for the architect proves to be most satisfactory for his employer.

One of the serious difficulties has been the prevailing idea that whenever any man is, by virtue of his office or otherwise, charged with the duty of erecting a public building—no matter what may have been his previous ignorance of such matters—the one thing for which, above all others, he is certainly qualified is to select a plan, and there is nothing else upon which the average committee-man is so touchy, as upon this question.

I have had a man say to me that he felt utterly incompetent to decide between the several designs, and when, to help him out, I suggested an expert, he became offended and insisted that I had not treated him with proper respect.

I once was given a list of instructions of what they did want and what they did not want in a certain building. At the competition an expert was suggested to aid the board in deciding which plan was best. The objection was made that it was unnecessary, as they knew just what they wanted, and it would be a useless expense. I had occasion afterward to examine the plan which had been adopted. Finding it not as I had expected, I compared it with the list of instructions, and found that no requirement in the list had been met, and everything they did not want was embodied in the plan.

These, of course, are extreme cases, for by no means every committee will answer this description. There are many good, hard-headed, practical men in charge of these matters, men who, with no expert, will not go far astray in regard to a design. I think it fair to say that, as a rule, *one among the best* plans of those presented will be adopted; but the more important the building the less, proportionately, a committee man knows about it, and the more liable he is to be mistaken. I have never known a competition in which the advice of a competent expert would not have been worth largely more than his services would have cost. It will often serve to correct errors of calculation as well as errors of judgment in the architect. It will give confidence to the people who are to use the building that it is safe, and allay all clamor against the committee for imagined errors of judgment in selecting the design. I regard the employment of at least one expert, professional adviser, as a practice to be insisted upon and urged until it becomes a part of every competition; and I would say, further, that in every important building the services of the expert ought not to end with the adoption of the plan. He should be retained as consulting architect until the building is completed.

Among the practices to be abandoned is the shortness of time usually allowed for the preparation of plans. Worthy and desirable competitors are not the idlers of the profession, and cannot, therefore, proceed at once and uninterruptedly in the preparation of a design for that particular building. Competitions ought to be made to interfere as little as possible with the *regular* business of the office. I know there is a great desire upon the part of committees to be doing something in the way of constructing the building, and they look upon the time spent in preparing plans as so much time wasted, forgetting that the success or failure of the whole enterprise is wrought out before a stone is laid. Whatever of hurry there is in the erection of the building, there ought always to be careful deliberation in preparing the plan.

One of the practices which has often misled well-meaning committees and even experts, is the inequality of presentation, drawings differing in number, scale and finish. For this, the remedy which has been sought, the use of line drawings without shading, perspective or color, is, in my opinion, but little less faulty than the trouble it seeks to correct. Whatever designs are presented should be made plain enough that competent persons can, without great difficulty or uncertainty, judge between them, and to ask any man to judge the appearance of a building by giving him a line elevation in black and white, is requiring an impossibility. Such drawings only half show the design, and for all practical purposes you might as well write out a description of the building and omit the elevations too. I would not require elevations, but I would require one or more perspectives, sufficient to show the building, giving the point of sight and the picture plane, and instead of saying there should be no shading, I would require them to be correctly shaded, and if color was to be considered as any element of the design, I would require them to be colored as nearly to the natural colors as possible. Nothing short of this will present the design with reasonable plainness, and while it will add something to the expense of a competition, I know of no other way in which a correct judgment can be obtained.

Another objection to many past competitions is, that architects have not been fairly treated in the matter of compensation, only the successful party being paid anything. While this is seriously objectionable, sometimes ruinous to members of the profession, it has been still more harmful to the public. Persons who imagine that, in this way, they are saving money, may as well deceive themselves. Architects when compelled to, have to protect themselves and they do it, often in these unpaid competitions by fighting new battles with old plans, slightly modified when required to suit the situation. Over-smart officials sometimes thus start out to get ideas from architects without paying for them, and usually end by paying for ideas they don't get. This method of competition has usually resulted in keeping out the better class of architects, who usually have plenty of work where compensation is certain.

Seeing this, there have recently, in this country, been several attempts made to enlist the services of what are reckoned the ablest architects. One of these cures, repeated two or three times I wish to speak of as being, I think, more objectionable than the disease it seeks to cure. I mean this high and low, sweet and sour, in and out, great and small style of competition, where "many are called and few chosen." This style of competition where the premium money is generously divided among a selected few eminent competitors as a sort of professional hackbone tender to enable them to go into competition with the remainder of the profession, who don't get anything.

The medicine has produced a cure wherever it has been tried. But it is one which has so many objectionable features, that for the credit of the manhood of the profession I hope no respectable architect will ever suggest such a thing again. The use of such an expedient only proves the extent of the evil it sought to correct. But there is a better and a fairer way to the profession, and no more expensive to the public. I would divide about one-half to one per cent of cost of the proposed building into four or five premiums, to be awarded to the most meritorious designs, omitting the successful competitor, give him the commission. This will always attract the best talent of the country, and with a proper award, the public will be well served, and architects as well paid as can now be expected. In these open competitions there will always be designs presented by totally incompetent persons, but if they have the time, it does them good to prepare them, and only puts the jury to the trouble of looking at them, which is not an unbearable punishment.

There is another point in regard to the subject, upon which I have a word to say. There are among the competitors in any mentionable case, some who have greatly more personal influence than others. There can be no fair judgment where the jury are friends of one man, and strangers or enemies to another. I therefore, would require all designs submitted under a "nom de plume," and should any competitor make his design known to the jury before the decision, it should be immediately excluded from the competition.

Competitions such as I have suggested, will not be found an evil, and if they could be made the rule, instead of the exception, the objection to competitions would pass away.

And as committeemen and public come to know more of what a competition ought to be, there will be more and more improvement in the manner of conducting them. That they have been objectionable, is not because there is any disposition upon the part of our employers to wrong us, but because of a lack of information and understanding of what is fair and right. Happily it is becoming known that in everything connected with the construction of a building, from the sketch by the architect to the furniture, if it is valuable, must be bought and paid for the same as anything else, that these, like all other things, are usually worth what they cost, and that five dollars don't buy ten dollars worth, and the man who starts out building to get something for less than its fair value, usually ends by being cheated himself, besides being laughed at as a fool by his neighbors.

If we have trodden upon the toes of any professional brother in our caricature of the mixed competition, we humbly beg pardon. They were as doses of heroic medicine given to save the patient's life, and we had to mix up a strong solution of ridicule to take the taste of the medicine out of the patient's mouth, and meant no harm to anyone. (Applause.)

The President: Mr. Yost's paper is open for discussion. If there are no remarks Mr. Forbush's paper will be next in order.

Mr. Forbush: Looking over this book, "Puck's Annual for 1883," I found an article which I thought you might like to hear, and the illustra-

tions of which I have roughly enlarged. The article is entitled "Sausage Architecture,"* and is as follows:

Architecture is a pretty convenient sort of a science. It would be rather difficult in these days to get along without it. The fewer clothes mankind has, the less necessity he finds for architecture. When he roamed the plains and woods in Nature's business suit, he did not indulge in any architecture to speak of. When he started out to ornament and enwrap his form in drapery, he began to turn his attention to constructing a habitation of the same material. This was the origin of the canvas tent, and the origin has stuck to it ever since.

After using brick, stone, iron, wood, paper and other materials, man began to yearn for new trimmings for the ornamentation of the structures. He was a long time striking something, but he did ultimately, as we shall proceed to explain.

(No. 1.) Puck's Annual does not pretend to be a universal history, and therefore cannot give all the actual details of the discovery of sausage architecture, but there is no doubt that it was invented long before the world had begun to cut its eye teeth. The cradle of the sausage may be put down to be in the neighborhood of Assyria. Sausages were manufactured in this region from the superannuated animals that had strayed from Noah's ark, and when the sausage had arrived at the requisite degree of hardness and staleness, it was used for the beards of statues and bulls.

(No. 2.) This cut represents Sennacherib, the mighty Assyrian king, as he appeared just before coming down like a wolf on the fold.

(No. 3.) We next hear of sausage ornamentation among the Arabians, as this illustration of a panel shows. The original was picked up late one Arabian night, and was carefully preserved in a dime museum, where our artist sketched it from still life. The Arabesque beauty of this design will be at once admitted. It is true that according to the Mohammedan creed nothing that hears any relation to a living thing is allowed to be represented.

A very learned discussion was carried on in Mecca between Abou Ben Jon-son and Arabi Ben Beyrum as to whether sausage ornamentation was akin to anything alive, and was opposed to the laws of Islam. Abdallah O'Flaherty, the holy carpet-shaker of Medina, decided there could be no objection to the article on religious grounds, provided no trichinæ had taken up their lodgings in the sausage. He further said that a healthy sausage could be distinguished at first sight and ought to present the above appearance. (A genuine sample was here shown.)

But there can be no question that the greatest strides in sausagery have been made in Germany. For many years it was a problem as to what should be done with the unused sausages. It may not be generally known, but it is a fact, nevertheless, that both the Thirty Years' and the Seven Years' wars arose from differences of opinion on this question.

There were enormous accumulations of leberwurst, saveloys, country and Frankfort sausages, and there seemed to be no cessation to the horrors of a fratricidal strife, when, in the year 1761, a savior, in the person of Herr von Culmbacher Pretzel Schweizerkase invented the system of petrifying sausages so as to make them in every respect like stone. The system still lives; indeed, a public building of any importance is not considered complete without stony sausage ornamentation.

One of the most magnificent edifices in the world, built in the sausage style, is in the lager beer temple at Gebratenesganzensteinkopfweschuhburg, in the semi-grand duchy of Kartoffelsalat. The capital of the columns consists of an (No. 4) abacus, ovolo and neck of festoons of leberwurst, with center pieces of true lovers' knots, constructed of polonies. The astragal is of an extra large size Fleischwurst. The frieze of the entablature is richly enlaced and decorated with medium sized tongue sausages, horse-shoe shape. The fillet, the cyma-recta, the corona and the cavetto are constructed of blood sausages of various forms in accordance with the architects' plans. The manner of their arrangement displays great ingenuity, and betokens profound study of literature of architecture from the year one.

On the northeast rear of the building is a choice (No. 5) monumental tablet, with curved leberwurst in bas-relief, with a German mustard pot at the base.

There is a remarkable story connected with this work of art.

The architect dreamt it out one night after supping on pumpnickel and sauerkraut, and, on waking up in the morning, immediately proceeded to put the realistic vision into execution, with what successful results may be seen in the annexed picture.

But by far the greatest triumph in this marvelous work is the (No. 6) grand memorial window which was constructed at such an enormous cost that, at the time of writing it has not yet been paid for. The window is in the regular church-fair medieval style, but has very little trace of tracery. In order to fill out the arched cell of the vaulting, it became necessary to lighten the irregular shaped masses of sausage left between the perforations by piercing the spandrels and reducing the frame of each foil in the *pons asinorum* of the third degree, and putting it on a *non compos mentis* base.

Those who imagine that the architect knew nothing about windows are recommended to consult Zell's encyclopedia. None but the very best of sausages were used for the building of this masterpiece of light aperture. The rectangular openings, it will be observed, have no internal splay, but the architraves on the exterior were made from special and superior material. Fifty black poodles and seventy-five malted cats were killed and seasoned, their flesh petrified and put into skins for the purpose. The sausages of the rose window beneath the arch are made of oleomargarine and "bob" veal, which give a light, airy, and at the same time rich effect to the whole structure. There is no doubt that sausage ornamentation is destined to become most fashionable as soon as the rage for Eastlake and Queen Anne style has died out." (Applause.)

Mr. Forbush's reading was received with applause. The sketches submitted were well drawn and illustrated the paper perfectly.

The President: Here is a telegram from Mr. McLean, of THE INLAND ARCHITECT, that arrived this afternoon. It reads:

Have been in a wreck all night. Will arrive at eight.

R. C. McLEAN.

The President: If there is no objection we will continue, as it seems to be the desire of some of the members to leave on the evening train, and we would like to have them here through the entire proceedings, so I suppose the best thing would be to keep right on. The next thing in order would be new business. I have here copies of the certificate furnished by the Western Association of Architects, for architects to fill out for their clients, stating the weights that the different floors of a building will carry. If necessary, we can adopt it, and have a copy sent to each one of the members of this association and to all the architects of the state.

Mr. Forbush: I think it had better be left optional with each member whether to adopt it or not. A man is the best judge of what he requires in his own business.

The President: I may as well state here, under the head of new business, that the architects of Ohio and other states were very well received and entertained by the Illinois State Association at the last meeting of the Western Association at Chicago, and that Cincinnati has been selected as the next place of meeting. I would like to suggest that it would be proper for the Ohio Association to have a committee on arrangements and entertainments to prepare for the next convention of the Western Association. I would like to hear from some of the gentlemen present.

Mr. Weary: I think that we ought to try and do our duty to them. If the Western Association are going to meet here, we ought to have a very interesting meeting, and any means of entertainment we provide will serve not only to entertain them but to entertain ourselves. A very good means of entertainment is now being generally adopted in the shape of a tour through the South, and, should we propose to adopt that, we have reason to think that we will receive the courtesies of some of the southern systems of railroads. It will be a very interesting means of entertaining them, and I move that we have a committee appointed to see that such arrangements be made.

*NOTE.—Figures indicate where illustrations were shown.

Mr. Forbush: I would amend that, that the committee have power to act as they may see fit in procuring a place of meeting and providing means of entertainment.

The amendment was accepted and motion carried.

Mr. Weary: I move that this committee have power to make all the arrangements, and that it be a committee of seven, as there will be a great many duties, at least four of them to be from Cincinnati, so as to leave a quorum here. Motion seconded and carried.

The President: This committee is to have power, I suppose, to make any collection or subscription, or would it be expected that the committee call on the State Association Treasurer.

Mr. Weary: That is something for the gentlemen to discuss.

Mr. Williams: I think we had better wait and have the committee find out what arrangements can be made and report at the next regular meeting in July. There will be plenty of time to adopt whatever they report, or make changes.

After some discussion the motion was carried.

Mr. Weary: I move that communications be sent out by the secretary to all members, twenty days before our next July meeting, as provided in the by-laws, so as to make the meetings annual instead of semi-annual.

Motion seconded and carried.

The President: I have a little matter to suggest here in regard to the *Sanitary Engineer*. As it is now published, the pages are numbered consecutively, including the advertisements. I think it is difficult, in binding them, to separate the advertisements. It makes the publication appear incomplete if bound without the advertisements. We might pass a motion here asking the publisher of the *Sanitary Engineer* to have the pages numbered so as to separate the advertisements from the text. I suppose a great many of the architects present take that paper, and find the same difficulty.

A motion was made and seconded that the secretary be instructed to respectfully request the editors of the *Sanitary Engineer* to change the mode of numbering the pages of the advertisements for the accommodation of the architects in binding their publications. Motion carried.

The President: Is there any other new business to offer.

Mr. Buddemeyer: I have a matter that I would like to bring up, but I do not know if it would come under this head. The Building Exhibit Company of Cincinnati has been formed, and I would like to make a motion that its action be indorsed by the association, as it would help it along. It should, perhaps, first be discussed, and then the motion made.

The President: Gentlemen, you have all heard the remarks of Mr. Buddemeyer. We would like to have a discussion.

Mr. Forbush: It is purely a local matter, and the association, as an association is not interested in it.

Mr. Yost: I really do not see what we can have to do with the matter, or how we can take any part in it. It is entirely a local matter, and I do not see how we can properly engage in indorsing it, or condemning it, or anything about it.

The President: I can state to the association that this company was formed to give manufacturers an opportunity to exhibit and to offer their material to the architect and builders in general. It of course is a local affair, but would, probably, be assisted by the indorsement of the Ohio Association. It may be of interest to the members of the association who may visit Cincinnati during the year, and wish to inspect some of the materials on exhibition.

Mr. Cook: I move we indorse it in a manner so as to request persons to exhibit their materials for the convenience of the association. Seconded and carried.

The President: If there is no other new business, we will hear from the Committee on Nominations, if they are ready to report.

Mr. Crapsey: The committee have been laboring under great embarrassment, but they got through their work all the same. The embarrassment is that they have so much material from which to make a ticket. As instructed by the vote of the convention, we offer two names for each office.

For president, C. F. Schwenfurth, of Cleveland, and J. W. Yost, of Columbus.

For vice-president, I understand, we are instructed to offer one name from each city?

The President: For vice-president, one from each of the largest cities: Cincinnati, Cleveland, Toledo, Columbus, and Dayton.

Mr. Crapsey: For vice-presidents: William Martin Aiken, of Cincinnati; F. S. Barnum, of Cleveland; C. A. Stribling, of Columbus; C. I. Williams, of Dayton; E. O. Fallis, of Toledo.

For treasurer, contrary to instructions, we offer only one name, H. C. Lindsay, of Zanesville.

For secretary, F. A. Coburn, of Cleveland, and W. R. Forbush, of Cincinnati.

Cleveland has been selected as the next place of meeting.

Mr. Yost: I would decline in favor of Mr. Schwenfurth, and move that he be nominated by acclamation.

Mr. Schwenfurth: I was about to resign in favor of Mr. Yost.

Mr. Yost's motion was seconded and carried.

Mr. Schwenfurth was then elected by acclamation.

Mr. Forbush: I would withdraw in favor of Mr. Coburn, and move that the secretary be instructed to cast a ballot in favor of F. A. Coburn, as secretary of the association next year. Motion seconded and carried.

Mr. Crapsey: Now, as there is only one candidate for each of the other offices, I move that the secretary be instructed to cast the ballot of the society for each of those names. Seconded and carried.

The President: The Committee on the Entertainment of the Western Association will consist of Messrs. Weary, Schwenfurth, Yost, Buddemeyer, Forbush, Crapsey and Rapp.

As the Nominating Committee has omitted the Executive Committee from their ticket, it would probably be more satisfactory if the members

present would name four or more candidates, and then the four getting the highest number of votes (together with the president) would comprise the Executive Committee for the next year.

The following names were then presented, viz:

Messrs. Yost, Weary, Barnum, Rapp, Crapsey, Aiken, Kramer, Williams and Cook.

A ballot was then taken with the following result:

Mr. Yost, having thirteen votes; Mr. Weary, thirteen; Mr. Barnum, eleven; Mr. Rapp, thirteen, were declared elected on the Executive Committee for the year 1887.

Mr. Rapp: I would like to read a communication from Mr. Allison, the president of the National Plumbers' Association. He was to have read a paper at this meeting, but writes:

Many thanks for your thoughtful consideration and invitation. It will be impossible for me to join you this afternoon, as this is our regular meeting-day for the Board of Exposition Commissioners. I shall endeavor to give you some attention tomorrow if the meeting is continued. Very truly yours, JAS. ALLISON.

I would suggest that Mr. Allison's paper, that was to be read at this meeting, be accepted if as read, and inserted in the minutes of the meeting. Motion made and carried.

Mr. Bates: I move that a vote of thanks be tendered to the retiring officers. Motion seconded and carried.

The President: I will appoint Messrs. Weary and Crapsey as committee to escort the president to the chair.

Mr. Schwenfurth was escorted to the chair, and Mr. Rapp said:

Gentlemen.—I retire from the position which I have held, with the warmest feelings for you all, and hope that under Mr. Schwenfurth's administration this association will show even more progress than it has during the first years of its existence, and that it will have a glorious future.

Mr. Rapp: I make a motion to tender a vote of thanks to the representatives of the press, and to the proprietors of this hotel, for the courtesies extended to this association. Motion seconded and carried.

The President: Is there any further business before the convention?

Mr. Lindsay: As treasurer of this association, I would like to have some statement as to the bills of the association; some of them are not paid, and it is necessary to have them paid.

Mr. Rapp: I will state that the Executive Committee had the bills of the last meeting corrected and paid. One bill, of Mr. Williams, was reduced from \$14 to \$10. The bills Mr. Forbush has are for printing and circulars, and should be attended to by the new Executive Committee, and I therefore move that these bills be referred to the Executive Committee. Motion seconded and carried.

Motion was made to adjourn *sine die*. Seconded and carried.

The President: This convention is adjourned.

A dinner was given the visiting architects at the Burnet House by the Cincinnati chapter, which was in every way enjoyable. At the invitation of the local chapter, the members also attended the performance at Heuck's Opera House. The exhibition of architectural drawings was very complete, those of C. F. Schwenfurth, of Cleveland, being especially notable.

Association Notes.

WESTERN ASSOCIATION OF ARCHITECTS.—Convention will be held November 16, 1887, at Cincinnati. J. F. Alexander, La Fayette, Ind., secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the first Saturday of every month, at 15 East Washington street, Chicago. Annual meeting first Thursday in October, 1887. Clarence L. Stiles, Chicago, secretary.

INDIANA STATE ASSOCIATION OF ARCHITECTS meets on the fourth Wednesday of January, April, July and October of each year. Annual meeting fourth Wednesday in October. E. H. Ketcham, Indianapolis, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at Kansas City, on the second Tuesday in January, 1888. Charles E. Illsley, St. Louis, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1887. F. B. Hamilton, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of August, 1887, at Spirit Lake. G. B. Baldwin, Sioux City, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 3, 1888. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Wichita on the third Tuesday of January, 1888. J. C. Holland, Topeka, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets semi-annually. Next meeting third Thursday in July, 1888, at Cleveland. F. A. Coburn, Cleveland, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Austin on the third Tuesday of January, 1888. S. A. J. Preston, Austin, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October each year. F. M. Ellis, Omaha, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month, H. O. Wehle, Louisville, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday, Builders' and Traders' Exchange. W. G. Williamson, secretary.

THE WESTERN SOCIETY OF ENGINEERS meets the first and third Tuesdays of each month at 4 o'clock, P.M., at 15 East Washington street, Chicago.

CHICAGO BUILDERS' AND TRADERS' EXCHANGE.

The committee of fifteen in charge of the reception and entertainment of delegates to the National Convention, March 29, hold regular weekly meetings. A sum approaching \$5,000 it is expected will be raised to defray the convention expenses, each branch of trade subscribing liberally for this purpose. The reports from other cities show that the approaching convention is already bringing the different trade organizations together, and the interest is active and general. W. H. Sayward, of Boston, the secretary of the temporary organization, is on his way to Chicago, visiting the different cities *en route* and will reach Chicago about the 16th instant.

At the request of thirteen members of the Exchange, a special meeting of the Exchange is called for February 17, at 12 o'clock, to consider the advisability of changing that part of Article V of the By-Laws, relating to the nomination of officers.

ILLINOIS STATE ASSOCIATION.

The regular meeting of the State Association convened on February 5, President Adler in the chair.

In absence of Secretary Stiles, R. C. McLean was appointed secretary pro tem.

Mr. Treat rose to a point of order, stating that there was not a quorum present, and the meeting went into informal session.

The President: Gentlemen, the chairman of the Executive Committee sends a line saying that he is unexpectedly prevented from coming, and sends a report from the Executive Committee, as follows:

Illinois Association of Architects:

GENTLEMEN,—It is the intention of your Executive Committee to have prepared for your consideration a series of symposia, beginning at the next monthly meeting. These symposia are groups of papers representing the views of different architects upon given subjects, and are prepared as follows: The architect whose name occurs first, makes a presentation of the subject to be considered, in a paper of greater or less length, which is then passed on to the architect next upon the list, and he, having written his view of the question, passes the two papers to the third, so on to the fourth, and the first man on the list then summarizes the question as presented by these various writers, stating not only their views, but such comments as he may have to make upon them. The list of subjects to be presented are as follows:

1. What are the present tendencies of architectural design in America?
2. What is the just subordination in architectural design, of details to mass?
3. To what extent is it necessary in design to emphasize the essentially structural elements of a building?
4. What are some of the architectural possibilities arising from the development of such materials as paper, glass, steel, etc.?

These four papers will carry us into June, beyond this the Executive Committee have not deemed it best to provide, awaiting the result which may attend this effort. It is hoped, however, that the interest raised by these symposia will be such as to warrant their continuance.

Your Executive Committee earnestly request that each member asked to contribute to this series will readily do so, bearing in mind that the papers are not intended to be formal or labored essays, but rather a free presentation of such views as the writer may have upon the given subject. In all cases the matter for discussion will be presented by the architect intrusted with the first paper, and following him it will be very simple for others to state such points as they may desire, in which they agree with him or differ from him.

If, at any meeting, members present wish to informally discuss these symposia, there will undoubtedly be an opportunity, and it is hoped that through means such as this, there may be fostered an interest in those general and apparently theoretical views which are, nevertheless, exceedingly valuable as the basis of sound architectural work.

A complete memoranda will be sent out to all the members the first of the week, containing the names of each one of the contributors in the series of symposia.

JOHN W. ROOT,
Chairman Executive Committee.

You have heard the report, gentlemen. It is something concerning which it is not at all necessary for the association to take action, inasmuch as the Executive Committee has full power to act in the matter; but I think I voice the sentiment of that committee when I request such of you as have any suggestions to make with reference to these subjects to do so now, so that the committee can be better guided in its action in the selection of topics, and also in the selection of members who are requested to aid in the discussion. I understand that in the case of the first subject the leadership will be in the hands of Mr. Root; the second under the leadership of Mr. Clay; the third under that of Mr. Sullivan, and the fourth will be in the hands of Mr. Burnham. In each of these there will be three others associated with the leader. The leader will have the leading paper, and will have a summary of all that is advanced; then there will be three associated with him to express their views, and there will be a notification sent to all of the members of the association of these subjects and of the gentlemen who have been selected by the board to participate in the discussion, so as to enable anyone who has any ideas which he believes would be of interest to the association to add them to the general discussion. For instance: Supposing at this time there were four of us,—Mr. Cleaveland, Mr. Holabird, Mr. Smith and Mr. Drake,—had a given subject; they would have the official preparation of all there is to be said about it; but any and all of us would be given time enough to think about the matter, that if we had any views to present we could do so; and we would have, at the same time, the advantage of the special effort of the four gentlemen selected for the subject. I believe that this will give a good deal of life and vim to our discussions during the next four months.

Mr. Randolph and others indorsed the scheme, and thought it a very good idea.

The President: It was a matter that was proposed at the first meeting of this Executive Committee, but action was deferred until now because of

the pressing character of the discussion of the sanitary bill, and also because it seemed as though the members of the committee were all of them so much occupied that they could not bring out this matter any sooner. It had been the intention to have this the first meeting at which this order of things would go into effect; as it is now it will be the next meeting. You will receive, in the course of a week or so, a summary of these subjects and also the names of those who have been selected by the Executive Committee.

Mr. McLean: Will I be able to get these subjects so as to print them by next Wednesday?

The President: I think so. I think if you will call upon Mr. Root on Monday he can give you all the information.

After some further discussion the meeting adjourned.

The following note has been sent to the different members of the state association appointed to write upon the different subjects to come before the association:

Dear Sir,—Inclosed please find a copy of a report presented by the Executive Committee to the Illinois Association of Architects, at the last meeting.

It is earnestly hoped that you will do your share toward making the series of symposia mentioned in the report, a success.

Your name has been mentioned in the list, also herewith inclosed, because you seemed to the committee especially qualified to write upon the subject with which your name is connected, and the committee will deem it an especial favor if you will write your views very fully and frankly.

Very truly yours,
JOHN W. ROOT,
Chairman Executive Committee.

The subjects of papers and those who have been appointed to review the subjects are as follows:

1. *March:* What are the present tendencies of architectural design in America?

John W. Root, Dankmar Adler, Clarence L. Stiles, W. W. Boyington or S. M. Randolph, John W. Root.

2. *April:* What is the just subordination in architectural design, of details to mass?

Louis H. Sullivan, W. L. B. Jenney, L. D. Cleaveland, O. J. Pierce, L. H. Sullivan.

3. *May:* To what extent is it necessary in design, to emphasize the essentially structural elements of a building?

W. W. Clay, Frederick Baumann, J. M. Palmer, J. J. Flanders, W. W. Clay.

4. *June:* What are some of the architectural possibilities arising from the development of such materials as paper, glass, etc.?

D. H. Burnham, Wm. Holabird, Normand S. Patton, S. M. Randolph, D. H. Burnham.

ARCHITECTURAL ASSOCIATION OF IOWA.

The third annual meeting of this association was held at Des Moines, January 12 and 13. In the absence of the president and vice-president the convention was called to order by the secretary, C. H. Lee. J. S. Blake, president of the Des Moines Association, was chosen chairman of the convention.

The secretary read letters of regret from President Josselyn and E. H. Taylor of Cedar Rapids. The minutes of the previous meeting were read and approved, after which E. S. Hammatt, the treasurer, read his report, which was approved as read. The board of management reported the name of E. L. Merrill, of Des Moines, for membership, and upon motion of W. L. Plack, the secretary cast the ballot for the association, admitting him to membership.

The Committee on Education, F. D. Hyde, chairman, reported progress, and was continued.

The Committee on the Draught of a Bill to Regulate the Construction of Party Walls, W. L. Plack, chairman, reported progress, and was granted further time.

The Committee on State Lien Laws, E. S. Hammatt, chairman, reported progress, and was continued.

The Committee on Western Architects' Association Bill upon Statutory Revision, C. H. Lee, chairman, read the bill as last revised by the committee in charge, and the report was received and placed on file. The convention here adjourned till the afternoon.

When the meeting was again called together the following motion was offered by Mr. Hammatt:

Resolved, That it is the sense of this association that any contractor who regularly employs a draughtsman and furnishes architectural plans shall be debarred the privilege of figuring on work in the offices of the members of this association.

The resolution, upon motion of Mr. Lee, was adopted and ordered printed and sent to each member of the State Association.

Mr. Hyde, Chairman of the Committee reported upon a Circular Letter Relating to the Competition Code, which was revised and passed upon as follows:

COMPETITION CIRCULAR ADDRESSED TO BUILDING COMMITTEES, ETC.

GENTLEMEN,—It having come to my knowledge that your committee is about to erect a public building, and may, perhaps, select your design by a competition, in which case it becomes my duty as secretary of the Architectural Association of Iowa, to send you the following circular letter in explanation of the position taken by the profession in this state, viz.:

First. That the Architectural Association of Iowa embraces all the reputable architects in the state.

Second. That the inclosed code was prepared for the government of competitions being formulated and first adopted by the Western Association of Architects after a year's work by the committee of that association, which was composed of the leading architects of the West, and that the same code has since been adopted by the architectural associations of twenty, including Iowa.

Third. It is the general belief of the majority of architects in all the above-mentioned associations, that competitions as generally conducted should be avoided as being the most possible way to secure a design, but should your committee decide to call for a competition, then we would respectfully urge you to adopt the inclosed code as being the most satisfactory manner of conducting such a competition. In calling for a competition, your object, undoubtedly, is to secure designs from the best men in the profession. To secure this object you must assure them in a legal way that they will receive fair play.

Though in rather brief and formal language, the points necessary to be guaranteed in order to avoid the current abuses of past competitions are all embodied in this code.

We are aware that it may need modifying. As a whole, however, it covers the ground fairly well, and is satisfactory to all honorable architects throughout the country. Though, perhaps, not absolutely necessary, still it is well to say, in view of what has sometimes occurred, that if any architect who is a member of our association or of the Western Association suggests to you the advisability of conducting competitions without

a specific agreement, or with one loosely drawn up, you may at once know him to be treacherous and dishonorable, and may safely conclude that if untrue to his fellows and the best interests of his profession he will be dishonest in the conducting of your business should you employ him.

In working for the results sought to be attained by the adoption of this code, we seek first to improve architecture in general, and give the people a better building for their money than can otherwise be secured; at the same time insure to the profession "a square deal and an honest count" and abolish a premium on dishonesty. If your building committee will cooperate with us we feel assured that much good will be accomplished, and one forward step will be taken by the whole community.

On motion of Mr. Hammatt the report was received; and on motion of Mr. Lee, was made the special order of business for the morning session.

Mr. Hyde read a memorial on the late W. W. Sanborn, of Clinton, and on motion of Mr. Lee this was received, ordered printed, and a copy sent to the family of the deceased.

The abolition of the August meeting was discussed, but no change was made.

On motion of Mr. Hammatt it was decided to hold the August meeting at Spirit Lake.

On motion of Mr. Hyde the secretary was instructed to correspond with secretaries of the Architectural Association of Minnesota, and of the Nebraska State Association of Architects, with a view of holding a joint convention.

On motion of Mr. Hammatt the secretary was instructed to send two notices of meeting to members, two weeks prior to each meeting.

On motion of Mr. Hyde the business successors of the late W. W. Sanborn, Messrs. Bessman & Messenger, were elected members of the association.

The revised Constitution and By-Laws were ordered printed, including the names and addresses of the officers and committees of the association, and a full list of the members, and that a copy be sent to each member not later than March 1, 1887.

An interesting paper upon "Competitions" was read by E. S. Hammatt, and the session adjourned to the following morning.

The convention was called to order at 10 A.M., Mr. Blake in the chair.

The committee's report on circular letter on competitions was taken up, and was altered and amended as printed above.

On motion of Mr. Plack, the resolution making THE INLAND ARCHITECT the official journal of the association was reconsidered and laid on the table, and the secretary instructed to furnish copies of the proceedings of the conventions to any paper applying for them.

The officers elected are as follows: president, E. H. Taylor, Cedar Rapids; vice-president, G. G. Baldwin, Sioux City; secretary, F. D. Hyde, Dubuque; treasurer, E. S. Hammatt, Davenport (re-elected); additional member of Board of Management, C. H. Lee, of Des Moines.

On motion of Mr. Hyde a vote of thanks was extended the local association for the liberal spirit shown in entertaining the visiting members.

Chairman Blake thanked the convention for general courtesy and assistance during the proceedings, and Mr. Plack resigned his membership to the association, which was accepted; and the meeting adjourned, to meet at Spirit Lake the second Thursday in August.

CHICAGO ARCHITECTURAL SKETCH CLUB.

The meeting of January 28 was one of the best attended and enjoyable of this year's series, the occasion being a stereopticon exhibit of one hundred views of European architecture, by John K. Allen, of the *Sanitary News*. Accompanying these, Mr. Allen read a delightfully composed and comprehensive description, historical in its nature, that of itself was pronounced well worth giving an evening to. The lecturer stated that he endeavored to show some architectural creation, marking the reign of each celebrated ruler or dynasty, and from the Acropolis at Athens, through Italy, Germany, France, and England, lead his audience to Scotland, where views of Edinburgh Castle, and other examples of ancient Scottish architecture, closed the series. A large number, perhaps a majority of the club, are of Scottish birth, and the latter views of the collection awakened considerable enthusiasm, the similarity of the general outline of the Acropolis to that of Edinburgh Castle and surroundings, suggesting that it looked as though "the architect of the Acropolis got his design from 'Auld Reekie.'" At the close of the lecture, Mr. Allen was, by unanimous vote, made an honorary member of the club. Among the visitors present were Mrs. John K. Allen, Mr. George P. Brown, conductor of the *Sanitary News*, and lady, and William Dodd, of Wehle & Dodd, architects, of Louisville.

ILLINOIS SOCIETY OF CIVIL ENGINEERS.

The Illinois Society of Engineers and Surveyors, composed as it is of many of the most eminent men in these professions in the state, as also of some leading men of a few other states, convened at Champaign, January 26, 27, and 28, for its second annual meeting. This society at its first meeting took rank as one of the most active and influential in the United States, and its published annual report was acknowledged by competent authority to be the most valuable sent out by any of the state societies. Some of the best men of the state contributed to its pages, and most valuable results have followed. Among the subjects discussed at this meeting were natural gas in Illinois, drainage districts, bridges, sewerage, and water supply. The president, I. O. Baker, professor of civil engineering in the university, who has done much to give the society its high standing, delivered his annual address on Wednesday afternoon, which was an able resumé of the work of the society, and an outline for future activity.

ST. PAUL CONTRACTORS' AND BUILDERS' BOARD OF TRADE.

There was a large attendance of the members of the contractors and builders at a meeting held at the Hotel Ryan, February 3. The feature of the meeting was the report of the president, Mr. E. E. Scribner, who has recently returned from a conference of delegates held in Boston to formulate a plan for forming a national association of contractors and builders. He spoke in the highest terms of the cordial hospitality of the Boston gentlemen, and greatly enjoyed meeting, as he did, the leading men in the building business in the United States. He gave many valuable suggestions in regard to the conduct of such associations as was gleaned from the

experience of the older builders. He stated that the greatest interest was felt in regard to this section of the country by eastern men, and that large numbers would come to St. Paul the coming year to see what they consider from the reports to be a remarkable city. Mr. Scribner gave a general description of the conference and the plan for the convention, March 29, 30 and 31. The St. Paul Contractors' Board voted unanimously to become a member of it, and send delegates to the convention.

KENTUCKY STATE ASSOCIATION.

The architects of the state of Kentucky organized, February 11, at Louisville.

The officers are: President, H. P. McDonald; First Vice-President, Henry Wolters; Second Vice-President, Kenneth McDonald; Secretary and Treasurer, H. O. Wehle. The board of directors are the officers and W. C. Clark, all of Louisville. A full report of proceedings will appear in the next edition.

WISCONSIN STATE ASSOCIATION.

The meeting held at Milwaukee, January 3, for the purpose of forming a state association, confined itself strictly to the business of formation, the adoption of a constitution and by-laws, and election of officers, etc., the date being that of the annual meeting of the Milwaukee association. After the reading of the secretary's report and the annual report of the treasurer, a general discussion followed as to the best method of procedure in forming a state association. The Milwaukee association, after turning over the funds in the treasurer's hands to the association about to be formed, adjourned *sine die*. The meeting then reassembled, with Mr. Jas. Douglas as chairman and George B. Ferry as secretary, and, after the adoption of a constitution and by-laws, the officers were chosen, as stated in the regular January issue. A committee of three was also appointed to secure the introduction of a bill, at the present meeting of the legislature, to amend the mechanic's lien law to include architects and engineers in its provisions. The name of the association is the Wisconsin State Association of Architects. The meetings will occur on the first Monday of each month, and the annual meeting will be held on the first Monday following the first Sunday of each year.

Railroad Notes.

THE Canadian Pacific Railway, through D. McNicoll, general passenger agent, issues in beautiful form the official programme of the winter carnival at Montreal, from February 7 to 12, inclusive. The circular gives full information of the special rates over that road during the carnival season.

ARE YOU going to New Orleans or Florida? If so, you can go via the Monon Route via Louisville or Cincinnati, and see the Mammoth Cave, Nashville, Blount Springs, Birmingham, Montgomery, Mobile and the Gulf coast for the same money that will take you through the dreary, uninhabited Mississippi swamps; we are confident you cannot select a line to the south enjoying half the advantages that are possessed by the Monon Route and its southern connections. No one should think of going south without visiting the Mammoth Cave, the great natural wonder of this continent. So much has been written of this world-famous wonder that it is impossible to say anything new in regard to it. This trip can now be made all rail, as the railroad has just been completed to the cave from our connection below Louisville. From Mobile to New Orleans (141 miles) the ride along the Gulf coast is alone worth the entire cost of the whole trip. When you decide to go south make up your mind to travel over the line that passes through the best country, and gives you the best places to stop over. This is emphatically the Monon Route, in connection with the Louisville and Nashville and the Cincinnati Southern railways, Pullman palace sleepers, palace coaches, double daily trains. The best to Cincinnati, Louisville, New Orleans, or Florida. For full information regarding single round trip rates, call on or address E. O. McCormick, General Passenger Agent Monon Route, Adams Express building, Chicago, Ill.

Mosaics.

ARCHITECT James McDonald, formerly of Green Bay, Wis., has opened an office in Omaha, Neb.

JOHN DAVIS & Co. are making a conductor-pipe with steampipe arrangement to prevent freezing. This steam-heating firm are giving special attention to the erection of wrought-iron conductor-pipes of all sizes.

ARCHITECT W. W. Boyington, of Chicago, is preparing plans for extensive factory building for the New England Anderson Pressed Brick Co. building, 276 by 142 feet, to be erected at Medford, Mass. Estimated cost, without kilns, \$35,000.

ABOUT March 1 the Nimick & Brittan Manufacturing Company will issue a new condensed descriptive catalogue, which will contain all that is in their former catalogues in a condensed form, together with a full line of new designs and new goods.

THE recent death of Mr. B. R. Hawley will not cause any change in the business which he had conducted for so many years in Chicago. The Hawley Laundry-Dryer business will, therefore, be carried on as usual, with the office in the old place, Room 101, New Adams Express building, 183-189 Dearborn street, Chicago.

In the assembly of the state of Wisconsin, Mr. Egery, of Racine, has introduced a bill which provides that any architect who devises plans for a factory, hotel, school, etc., and fails to include fire-escapes and outward-swinging doors, shall be deemed guilty of a misdemeanor and fined from \$25 to \$100; also, that anyone who constructs such buildings without such safeguards shall be fined \$100.

MERCHANT & Co. announce that in order to better facilitate their increasing business in Chicago and points west thereof, they removed on January 1 from their old stand on Kinzie street to 202 Lake street, Chicago. They are prepared to make prompt shipments from Chicago of their

"Gilbertson's Old Method" and "Camaret" guaranteed plans of roofing plates, as well as "The Spencer" bright plates, together with a full line of the cheaper grades of both roofing and bright plates. Also hot and cold rolled copper, solder, etc.

An ordinance was passed by the Chicago city council, December 28, amending the municipal code in regard to the construction of hoistways in which elevators are used. It requires that they shall be constructed entirely of brick from the lowest point, extending up through and six feet above the roof. All openings in hoistways shall be protected by iron doors, and no wood shall be used on the inside of hoistways.

It is interesting to note that the *National Builder* (now called "Hill's"), which, for the past three years, has advised its subscribers to "give architects the go-by," is now under a new and capable management, and recommends that "the first thing to be done is to go and get the best architect within your reach and consult him, before consulting any builder or contractor." The journal should succeed. The present publisher, Thomas E. Hill, is well known as the author of "Hill's Manual."

THE Tiffany Pressed Brick Company, whose standing advertisement may be found in this journal, would like to call the attention of architects, contractors and owners who are contemplating the use of pressed brick in their building operations during the coming season, to the new Hobbs building, Nos. 165 and 167 Market street (opposite the Farwell Block), recently erected, and faced with the Tiffany brick, and presenting one of the finest store fronts in the city; and also to the Bines building, at Nos. 327 and 329 Dearborn street, fronting on Third avenue as well, which was erected more than one year ago of their brick, and which has never been disfigured by any alkaline or white exudation upon the surface of the walls, which disfiguration is so common.

THE pita plant of Honduras invites the enterprise of American capital and Yankee invention, says the *New York Herald*. Only one thing is needed and the lucky man's fortune is made. Mr. Burchard, our consul, reports that this pita plant, which has never been cultivated, grows spontaneously and in apparently inexhaustible quantities by the margin of every river and lagoon, and, indeed, anywhere below the altitude of two thousand feet. It can be had for the cost of cutting. The fiber is susceptible of a thousand uses. The people of Honduras convert it into thread for sewing boots and shoes, and into nets, fish lines and cordage. The finest hammocks and most costly are also made of it. The small quantities which have been sent to this market have been manufactured into handkerchiefs, laces, ribbons, false hair and wigs. The difficulty is to decorticate the plant without rotting or otherwise injuring the fiber. The man who can do that will be able to take fortune at the flood. In other words, brains will bring bullion.

THE new circular of B. P. Bower & Co., of Cleveland, Ohio, gives an illustration and complete description of the Bower Sewer-gas Trap, which will be of interest to architects, sanitary supply men, plumbers, and the building trades men in general. This trap has been manufactured by B. P. Bower & Co. for many years; its practical working has been most satisfactory, and it has not only "held its own," with all other devices designed for a like purpose, but the demand for its use has steadily increased. It was awarded the gold medal at the *Exposition Universelle*, held at Paris in 1878, and it also took the gold medal at the International Health Exhibition held at London in 1884. The Bower Sewer-gas Trap is so constructed that the overflow from the basin discharges below the water line, thus preventing a free circulation of air from one connection to the other, and the valve effectually seals both inlet and overflow from back pressure and absorbed gases. The circular illustrates the combination, the regular and the double combination styles of this trap, and the various parts and connections for same, and it will be mailed to any address on application to the manufacturers.

Synopsis of Building News.

Albany, Ga.—Architect Gust. E. Leo, of Atlanta, reports: For Samuel Farkar, two-story brick, 36 by 68 feet; slate roof; cost \$6,500; projected.

Alleghany, Pa.—Architects Alston & Heckert, report: From present outlook think building will be brisk during the coming season. There is an uneasy feeling among workmen about wages and hours, but it will probably be settled as last year, on the nine-hour basis.

For Alex. Bennie, two-story frame, 21 by 48 feet; slate roof; cost \$3,300; taking figures. For James Horrocks, two three-story brick buildings, 32 by 52 feet; tin roof; cost \$5,200; taking bids. For C. L. & P. Tel. Co., three-story brick building, 54 by 80 feet; brownstone and terra-cotta trimmings, tin roof; cost \$30,000; plans in preparation.

Atlanta, Ga.—Architect Gust. E. Leo reports: Present condition of building trades is rather dull on account of unfavorable weather, but outlook for the coming season is satisfactory, probably for Atlanta better than last year. In my report there are no buildings mentioned for which plans are not under construction. Considerable building is projected and will be done in the state, for which no definite decision has been made up to the present time.

For O. Keefe, two-story frame dwelling, 48 by 76 feet; slate roof; cost \$6,000; projected. For Jacob Schane, two-story frame dwelling, 42 by 72 feet; cost \$4,500; projected. For Julius Hartmann, two-story summer residence, 27 by 45 feet; cost \$1,600; under way; also considerable work reported elsewhere in this issue.

Charleston, S. C.—Architect Gust. E. Leo, of Atlanta, Ga., reports: For James Allen, new front and improvements to brick store building, 25 by 140 feet; cost \$4,500; under way.

Chicago.—Although it is yet early to predict what the coming building season may be, a tour among the architects, contractors and material men of the city reveals many a project not yet far enough advanced to be assured. The boards in the architects' offices are already well filled, most of the work in hand is, as usual at this time of the year, preliminary sketching. If the amount of sketching now being done is any criterion, it is safe to say this year will be a big one in building circles, and in fact without a precedent. It is not at this time thought that the labor agitations will much affect building, the only trouble at all looked for being perhaps with the carpenters. On the whole, the general outlook is even better than at this time last year.

Architect O. J. Pierce reports: For Allen & Todd, a two-story and sub-cellar residence, 25 by 60 feet, on Van Buren street near Wood; St. Louis pressed brick, brownstone trimmings; cost \$6,000. For C. E. Gurney, a three-story and sub-cellar residence on Van Buren street near Leavitt; Chicago Anderson pressed brick, brownstone trimmings; cost \$6,500.

Architect W. I. Beman, reports: For E. F. Gorton, two two-story frame dwellings, 32 by 58 feet, on Greenwood avenue; cost \$7,500. For C. E. Seaton, two-story frame dwellings, 32 by 63 feet, on Greenwood avenue; cost \$8,000. For E. D. Swaine, two-story frame dwelling, 30 by 50 feet; cost \$5,500. For R. A. Shaller, two-story frame

dwelling, 32 by 55 feet; cost \$9,000. For Mrs. B. Stein, two-story frame dwelling, 44 by 52 feet; cost \$8,000; under way.

Architect Clinton J. Warren reports: For the Nebraska extension of the C. R. I. & P. R. R., six two-story depots and office buildings at various places on the line; brick, slate roof; average cost \$12,000 each. For W. G. Press, two-story frame dwelling at Woodlawn; cost \$8,000. For Mr. Valentine, two-story and basement residence at Kenwood, first story and basement of stone, second story of Tiffany pressed brick, slate roof; cost \$25,000.

Architect W. W. Boyington has prepared plans for two additional stories to the C. R. I. & P. and L. S. & M. S. railway depot on Van Buren street, to be used for the offices of the companies; stone and terra-cotta, slate and tile roof; estimated cost \$100,000.

Architects Donnellan & Nothnagel have prepared plans for a three-story and basement store and hall building, 46 by 25 feet, to be erected on West Monroe street; Bedford stone, pressed brick and terra-cotta; cost \$140,000.

Architect R. G. Pentecost has prepared plans for J. Snyder for two four-story apartment buildings, 48 by 70 feet, 995 and 997 North Clark street; pressed brick and brownstone; cost \$20,000. For W. H. Robertson, two-story frame dwelling, 27 by 46 feet, in South Evanston; cost \$4,000. For himself, two-story frame dwelling, 21 by 42 feet; cost \$3,500. For H. Sweet, four two-story brick and stone flat buildings, 21 by 42 feet, on Wilmot avenue; cost \$14,000.

Architect C. A. Weary has plans for H. Roberts, for two two-story stores and flats, 42 by 50 feet, on West Jackson street; pressed brick and stone; cost \$8,000. For Heaton Owsley, two three-story stores and flats, 26 by 60 feet, on West Harrison street; brick and brownstone; cost \$7,000.

Architect W. G. Barfield: For J. C. Scales, Lake View, two-story stores and flats, 44 by 60 feet; pressed brick; cost \$5,000. For David Berg, two-story dwelling, 25 by 70 feet on Wabash avenue; cost \$12,000.

Architect A. Smith: For Lewis & Stoneman, two three-story stores and flats, 50 by 48 feet, on Ogden avenue; pressed brick and brownstone; cost \$11,000.

Architect A. Bessler. For Ben. Krump and Jac. Wolf, three-story and basement store building, 44 by 75 feet, on W. Twelfth street; cost \$10,000; under way; A. Dressel, mason; C. Geyer, carpenter. For Wm. Boehmer, three-story and attic dwelling, 30 by 46 feet, on Centre avenue; cost \$5,600; under way. For Joseph Roderer, three-story store building, 25 by 75 feet, on West Twelfth street; cost \$7,400; under way.

Architect E. A. Humble has prepared plans for M. Maloney, for three-story store and flat building on Wabash avenue and Thirty-sixth street, brick and stone; cost \$7,500. For Chas. Mulvey, two two-story and basement buildings, 3607 and 3609 Wabash avenue, brick and stone; cost \$7,000.

Chattanooga, Tenn.—City Engineer A. C. Carey, reports the aggregate amount expended in building improvements during 1886 was \$1,076,347. For 1887 the outlook is even brighter, and buildings are already contemplated for the first half of the year that will aggregate almost the amount above given.

Cincinnati, O.—Reported by Lawrence Mendenhall.

The month of January has been full of interesting events to the building community, for during the month the question of wages has been settled in several branches, to say nothing of the many interesting and important meetings held by our Builders' Exchange.

This growing association appointed a committee to meet with the architects, and assist in the preparation of new building laws. This is the second attempt made to formulate laws such as are above-mentioned, the first being too verbose, and for that reason their merits were not understood. Let us hope that Number Two may pass and become enactive.

Indications point to a fairly good season, and, in fact, to a busy one, if no disturbing influence arise. I think that the labor question is exaggerated, and the contractors are oftentimes to blame by a too free expression of ungrounded fears which add strength to all labor unions, and give them strength also which they do not possess. A mutual, conciliatory, meet-you-half-way sort of a spirit, is what is needed now, and indications point that way.

The boss brick contractors have acceded to the following terms, namely, 50 cents per hour for nine hours' work, and 45 cents per hour for eight hours on Saturday. The carpenters will pay 28 cents per hour, which arrangement appears to give satisfaction, as does the preceding one.

The Permanent Building Exhibit Company is now incorporated, and the following gentlemen have been nominated as directors: W. A. Megine, James Allison, Dennis Flaherty, Lawrence Grace, O. S. Tuttle, Wm. Griffith, Lawrence Mendenhall, Geo. W. Rapp, and Isaac Graveson. Letters of inquiry, and even applications for space, are already coming in to Col. W. L. Robinson, temporary chairman.

The State Association of Ohio Architects, at their meeting, January 20, passed resolutions indorsing the exhibit, as did also the Builders' Exchange, and the Cincinnati Chapter of Architects.

In closing, let us hope that all the indications for a busy season may be fully realized.

Architect E. Anderson reports the following: The First National Bank of Connersville, Indiana, have closed a contract with Downs, Ready & Co., for the erection of their new bank, size, 90 by 185 feet. The building will be three stories high, of pressed brick, with terra-cotta Bedford stone, and iron decorations, and with a large hall on third floor; plate, cathedral, and other decorative glass is liberally used. The plans reflect credit on Mr. Anderson. The same architect is also engaged on plans for the rebuilding of the large machine shop of P. H. & F. M. Roots, Connersville, made necessary by their growing business.

Architect Gustave W. Drach reports: For Mr. A. Nelson, a brick residence of ten rooms, freestone trimmings, terra-cotta panel, copper tower, slate roof, etc.; cost \$8,000. Stable and ice house for the Stone Lake Ice Co. The stable is built of brick, has accommodations for 26 horses, and is fitted with all modern improvements. For Mr. G. W. Kyte, a frame house of eight rooms, slate roof, etc.; cost \$4,000. Prospects fair.

Architects Forbush & Green report: For T. A. Snider, a brick house of twelve rooms, slate roof, cement gables, hardwood throughout; cost \$15,000. For J. W. Crothers, a pressed brick and shingle residence of nine rooms, with slate roof, etc.; cost \$9,000. For Sebastian, May & Co., a fine business house of brick. The Catholic Church at Wyoming, Ohio; cost over \$5,000.

The Cincinnati Art School building is well under way, and in fact, ready for the roof. The combination of blue limestone and Long Meadow brownstone and the red tile roof, is extremely pleasing to the eye. Architect McLaughlin himself is quite proud of "the work of his hands," as it were.

Architect Henry E. Siter has prepared plans for a beautiful bank building at Sidney, Ohio. This architect's time always seems well employed.

Architects Samuel Hannaford & Sons report: Jacob Elsas adds two stories and builds an entire new front to his building on Race street. M. E. church building at Cumminsville is two stories with tower, built of stone, with slate roof; \$15,000. Sketches prepared for the convent of the Sacred Heart chapel.

A beautiful fountain at Clifton, the gift of Henry Probaco, Esq. This is now being executed, the body being of granite, with bronze panels.

B. Bettmann, Esq., is building a stone front dwelling of twelve rooms, tin roof, hardwood finish, etc.

Sunday school and lecture room for the Episcopal congregation of Clifton, stone, with slate roof.

Plans being prepared for a store to be built jointly by H. W. Derby and Chatfield & Woods, iron front, extending seven stories, with a frontage of 73 feet and a depth of 90 feet.

Architect S. E. Des Jardins reports the following: For W. H. Wyman, Esq., a frame dwelling two and one-half stories high, eight rooms, shingle roof, etc. For Richard McComas, Esq., a frame dwelling two stories high, seven rooms and shingle roof, etc. For Charles F. Loudon, Esq., a frame dwelling, or rather alterations and additions. For N. B. Thompson, Esq., a frame dwelling of nine rooms, two and one-half stories, slate roof. For J. F. Moorbrink, extensive alterations and additions, slate roof, etc., to an old residence.

Creighton, Neb.—Architect W. K. Ball, of Creston, Iowa, reports: Plans prepared for a brick veneered residence, 39 by 64 feet, stone trimmings, for A. McGill.

Creston, Iowa.—Architect W. K. Ball reports: Nothing new projected for spring as yet, and most of the builders and mechanics are idle. For First M. E. church, brick veneered church building, 62 by 97 feet, stone trimmings, slate roof, steam heat, cathedral glass, etc.; cost \$12,500; preparing plans.

Denver, Col.—Architect D. McD. Graham, successor to W. H. J. Nichols reports: Prospect for the coming year is good at present; we anticipate a moderate boom; however we have labor sufficient for all purposes, so would not encourage many to come here on account of prospective building activity.

Dexter, Mich.—Architect Claire Allen, of Ionia, has prepared plans for the school board for a two-story school building, 83 by 79 feet; brick, cutstone trimmings, slate roof, galvanized iron cornices, closets, stained glass, hot-air heat, hardwood finish; cost \$13,000, including Smead's system of heating and ventilating, also dry closet system; also reseating, heating, ventilating, etc., for old school building; L. W. Briggs is chairman of the board; work to be commenced March 1; to be completed October 1, 1887.

Dubuque, Iowa.—Architect F. D. Hyde reports: For John Hennessey, five-story warehouse, 73 by 113 feet, brick and terra-cotta; cost \$30,000; plans in preparation. For A. E. Ferguson, two story frame cottage; cost \$4,000; James Howie, contractor.

Elgin, Ill.—It is estimated that the amount expended in building improvements during 1886 was \$500,000.

Evanston, Ill.—Architect John H. Coxhead, Chicago, reports: For Charles W. Northup, three stores with hall above, 67 by 30 feet; brick; cost about \$6,000; contracts not let.

Evansville, Ind.—Architects Reid Bros. report: Outlook for the coming season is very flattering, and, unless strikes or other unforeseen drawbacks occur, will have an exceptionally good year in this city. For Chas. Viele, chapel, 28 by 44 feet, for St. Paul's church, stone wall, slate roof, hardwood finish; cost \$5,000; projected; Jacob Meyer & Bro., builders. For same, remodeling rectory, 25 by 80 feet, two-story brick, slate roof; cost \$2,500; projected; John S. McCooke, builder. For Dr. H. J. Schlapp, remodeling store building; cost \$10,000; projected; contract not let.

Fargo, Dak.—Architect George Hancock reports: The present outlook for building in North Dakota is better than it has been for the past three years, and the coming season promises to be a very active one in all kinds of building.

Fayetteville, Ark.—Architect Fred. J. H. Rickon, of Little Rock, has prepared plans for W. J. Patton, for a brick residence, estimated cost \$5,000.

Girard, Kan.—Architects Miller & Thain, of Chicago, Ill., have prepared plans for the Presbyterian Society for a brick and stone church building, 72 by 60 feet; cost \$10,000.

Grand Island, Neb.—Architects Rittenhouse & Brage report: Present condition of building is quiet. Outlook good for spring. Contractors are busy completing the work under way to be ready when the season opens.

For Fred Hedde, three-story store building, 66 by 90 feet, brick, cutstone trimmings, galvanized iron cornices, tin roof; cost \$25,000; nearly completed; J. D. Purdy, builder. For Platt & Ravine, two-story and basement store building, 44 by 100 feet, pressed brick, galvanized iron caps and cornices, tin roof; cost \$9,000; nearly finished; Charles Guenther, builder. For Williams and Kerr, three-story and basement store building, 47 by 100 feet, pressed brick, cutstone trimmings, galvanized iron cornice, tin roof; cost \$15,000; basement walls nearly finished; contracts let separately. For Hon. O. A. Abbott, two-story and basement residence, 48 by 57 feet; cost \$12,000; nearly finished; J. D. Purdy, builder.

Ironton, O.—The commissioners of Lawrence county, O., will receive sealed proposals until noon, city time, February 23, 1887, for the erection and completion of a stone jail, with iron and steel cells, corridors and bathrooms, and a jailer's residence, of brick, with stone basement and slate roof, in accordance with drawings and specifications prepared by S. Floyd Hoard, architect, Ceredo, W. Va., at which time bids will be opened in presence of attendant bidders. Bids will be received upon the building as a whole, and upon the various parts of the work, as subdivided by specification. Bids to be forwarded properly indorsed and inclosed to M. S. Bartram, auditor of Lawrence county, Ironton, O., where the drawings and specifications can be seen. Dwelling portion with family rooms on first and second story; kitchen, laundry, pantry and store-rooms in basement, and rooms for servants in attic. Jail, three floors; sixteen cells on first and second; large room on third for special use, to be utilized for eight additional cells when required. Hot and cold water, castiron sewerage and vents, and gas throughout.

Jersey City, N. J.—Plans have been drawn for a three-story Queen Anne cottage for Thomas H. Williams, Bergen avenue and Emery street, electric light and elevators, and all modern improvements.

Kansas City, Mo.—Among the buildings projected is a hotel to cost \$750,000; Frank Poor, proprietor of the Metropolitan Hotel, is interested; E. P. Brink is the architect. Mr. Brink has also prepared plans for a block of fourteen houses, to be erected for E. A. Phillips at a cost of \$35,000.

Architect H. B. Prudden has under way a \$25,000 residence for James Yates. Architects Van Brunt & Howe are preparing plans for the Kansas City Club House; to cost about \$100,000.

Keokuk, Ia.—Architect I. C. Wykoff reports: During 1886, fifty-seven frame dwellings were erected; aggregate cost, \$81,750. One brick warehouse cost \$6,000. Miscellaneous, including repairs, additions, barns, etc.; cost \$33,000.

Louisville, Ky.—Business with the architects is somewhat quiet at present, but all seem confident of a busy spring season. The state house commissioners of the State of Kansas have adopted the design of Architects McDonald Bros., of this city, for the extension and completion of the state house at Topeka.

Architect Mason Maury reports: For C. V. Johnson, three-story brick building, 30 by 65 feet, on Brook street; stone trimmings, slate roof, closets and bath, stained glass, slate mantels, etc.; cost \$6,000; to be commenced at once. For Mrs. C. K. Crawford, three-story building, 35 by 70 feet, on Third street; pressed brick, stone trimmings, slate roof, hardwood finish and tiling, mantels, dumb waiters, speaking tubes, closets and bath, stained glass, etc.; cost \$8,000; to be commenced at once. For Foster Thomas, three-story residence, 37 by 70 feet; pressed brick, stone trimmings, slate roof, hardwood finish

and tiling, mantels, dumb waiters, electric bells and speaking tubes, stained glass, closets and bath, steam heat, etc.; cost \$13,000; to be commenced at once.

Architect Chas. J. Clarke reports: For K. A. Robinson, rebuilding four-story business house; brick, stone and terra-cotta trimmings, slate roof, galvanized iron cornice, skylights, stained glass, hardwood finish and tiling, slate mantels, etc.; cost \$15,000; to be commenced at once. For Louisville Cotton Compress and Warehouse Company, two-story wood and corrugated iron warehouse, 200 by 100 feet, fireproof, iron roof, galvanized iron cornices, skylights, steam power, etc.; cost \$11,000; commenced February 1.

Mackinac, Mich.—Architect John O. Plank, of Coshocton, O., has prepared plans for a hotel building, to be erected here at a cost of \$150,000.

New Corporations.—The Flushtank Company of Chicago, to manufacture flushtanks; capital stock, \$50,000; incorporators, Benette Williams, Theodore Sheldon, and Henry A. Wilson. Certificates were filed for record of an increase in the capital stock of the Crane Brothers Manufacturing Company at Chicago, from \$1,000,000 to \$1,500,000. The Elgin Brick and Tile Company, at Elgin; capital stock, \$20,000; incorporators, Charles Markhoff, W. M. Lamming, Andrew Magnus, William Grote and David McBride. The Standard Ventilator Manufacturing Company, at Chicago; capital stock, \$10,000; incorporators, John P. Elkstrom, R. P. Hollett and John Maxwell. The Alton Electric Light, Power and Steam Supply Company, at Alton; capital stock, \$10,000; incorporators, George N. Black, R. D. Lawrence, and S. H. Jones. The Arcadian Brown Stone Company, of Chicago; capital stock, \$100,000; incorporators, Austin Moody, Sylvester Marshall and Orren H. Benson.

Omaha, Neb.—The Bee's review of the year in Omaha shows that 1,616 buildings were erected in Omaha during 1886, at a cost of \$5,024,689. The grand aggregate of public and private improvements is \$7,230,738.

Oshkosh, Wis.—Architect William Walters has prepared plans for the new city hall, 72 by 72 feet, to be built of pressed brick and cutstone; cost about \$40,000.

Pelham, Ga.—Architect Gust E. Leo, of Atlanta, reports: For J. L. Hand, additions and improvements to frame residence, 70 by 103 feet; cost \$4,500, under way.

Pikeville, Ky.—Architects McDonald Bros., of Louisville, report: Advertising for proposals for the erection of a two-story court house, 60 by 70 feet, brick, stone trimmings, slate or tin roof, galvanized iron cornices, iron channels, beams, etc., fireproof, slate mantels, etc.; cost \$22,000.

Richmond, Tex.—Architects McDonald Bros., of Louisville, Ky., report: For Fort Bend county, two-and-one-half-story court house, 68 by 75 feet, brick, lime: stone trimmings, slate or tin roof, galvanized iron cornices, iron channels, beams, etc., partially fireproofed, hardwood finish and tiling, closets, etc.; cost \$24,800; commenced February 1; G. F. Trester, general contractor.

Roanoke, Va.—Architects McDonald Bros., of Louisville, Ky., report: Two-story court house, 60 by 75 feet, brick, stone trimmings, slate or tin roof, galvanized iron cornices, iron channels, beams, etc., fireproof, slate mantels, etc.; cost \$22,000; projected.

San Diego, Cal.—Architects Reid Bros., of Evansville, Indiana, report: For the Coronado Beach Co., hotel building, about 450 feet square, with open court in center, 500 rooms, concrete foundation, granite first story, frame superstructure, slate roof; cost \$300,000; under way; separate contracts; Coronado Beach Co. furnish most of material.

St. Louis, Mo.—Architect Thomas Walsh has prepared plans for the new college church and St. Louis University buildings; cost about \$195,000.

Thomasville, Ga.—Architect Gust E. Leo, of Atlanta, reports: Remodeling court house for Thomas county; cost \$10,000.

Topeka, Kan.—Architects W. R. Parsons & Son, report: For Cloud county, Kansas, two-story brick court house, 80 by 100 feet, slate roof, steam heating; cost \$35,000; plans in course of construction.

Vicksburg, Miss.—Architect William Stanton reports: Present condition good and outlook promising. For Sisters of Mercy, two-story brick, 60 by 120 feet; cost \$21,000; computed; Beck & Bro., contractors. For J. F. Baum, five three-story and basement buildings, 25 by 103 feet; cost \$30,000; Beck & Bro., contractors. For Jos. Podeska, two three-story brick buildings, 27 by 147 feet; cost \$12,000; Curphey & Mundy, builders. For Wadsworth Estate, three-story brick building, 23 by 103 feet; cost \$7,000; S. Spengler, builder. For E. H. Raworth, two-story frame dwelling, 48 by 72 feet; cost \$4,500; completed; Curphey & Mundy, builders. For school board, one story frame school house, 89 by 72 feet; cost \$5,500; completed; Beck & Bro., builders. For same, one story frame school house, 87 by 72 feet; cost \$4,887; completed; Ryan & Bro., builders. For same, two-story brick school house, 66 by 92 feet, tin roof; cost \$15,000; under way; Beck & Bro., builders. For C. O. Willis, two-story frame residence, 52 by 64 feet; cost \$10,000; nearly completed; Curphey & Mundy, builders. For Samuel Field, two two-story frame tenements, 26 by 88 feet each; cost \$6,100; under way; Curphey & Mundy, builders. For V. Piazza, three-story and basement brick hotel, 87 by 148 feet; cost \$40,000; projected. For S. P. Nutzer, two-story frame dwelling; cost \$6,000; projected. For S. Spengler, two-story frame dwelling; cost \$2,500; projected.

Waukegan, Wis.—Architect William Walters, of Oshkosh, is preparing plans for insane asylum to be erected here; Myron Reed is chairman of the building committee; contracts to be let about March 1.

Woodworth, Ill.—Architects Fromann & Jebson, of Chicago, are preparing plans for the Lutheran Evangelical Society for a frame church building, 44 by 80 feet; cost \$7,000.

The Jackson Heat-Saving and Ventilating-Grate.

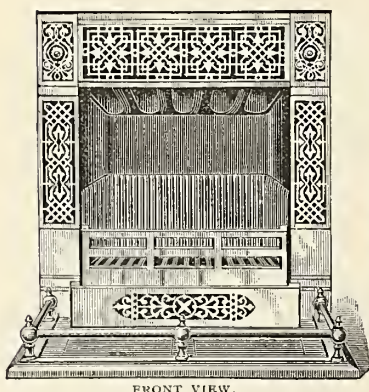
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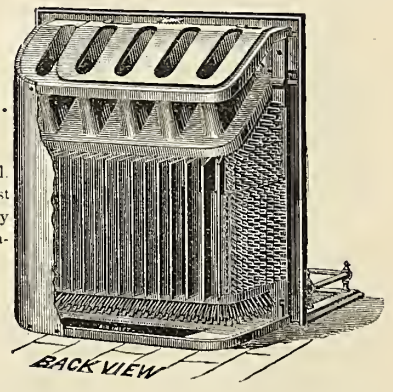
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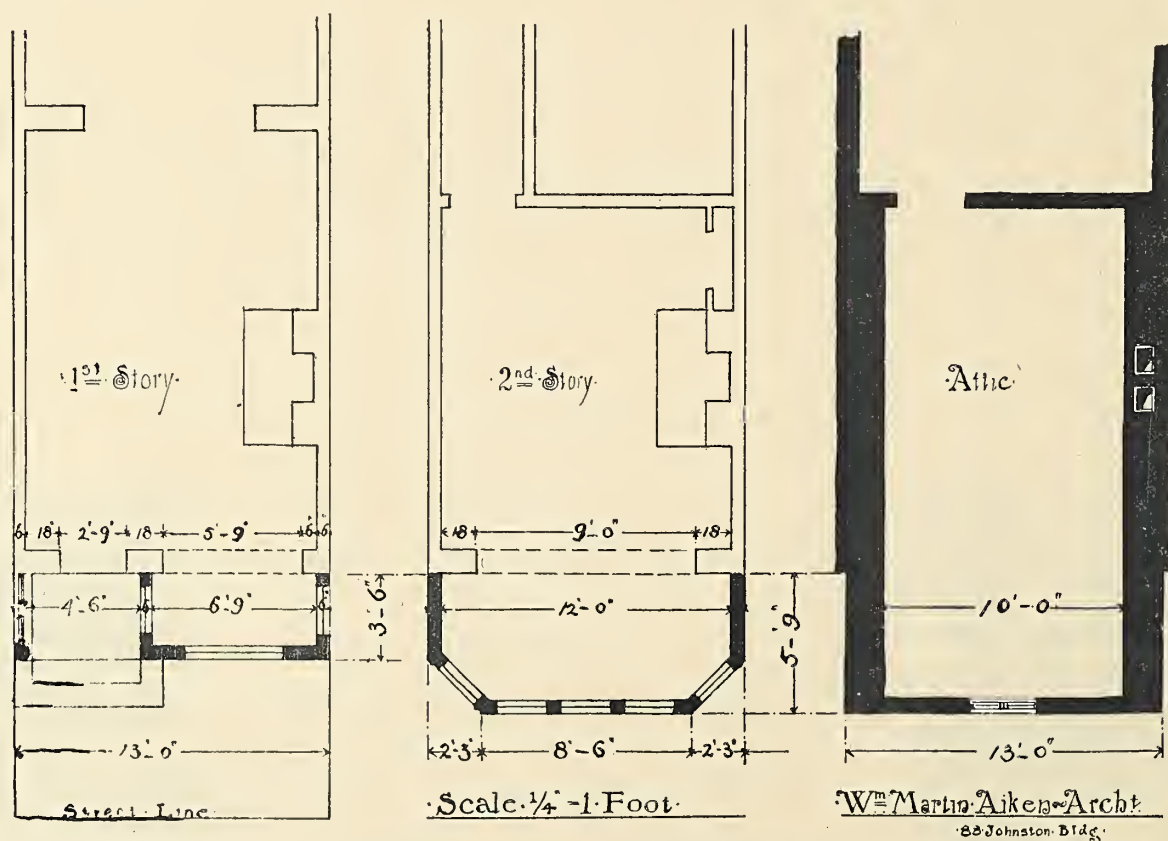
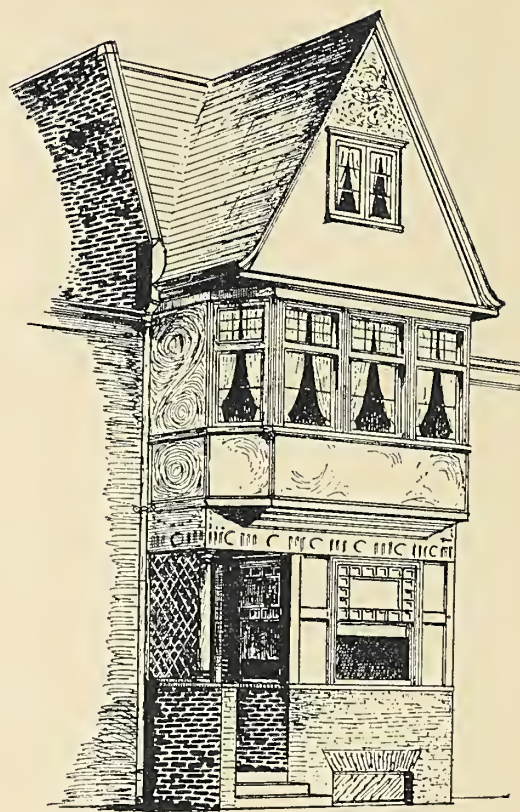
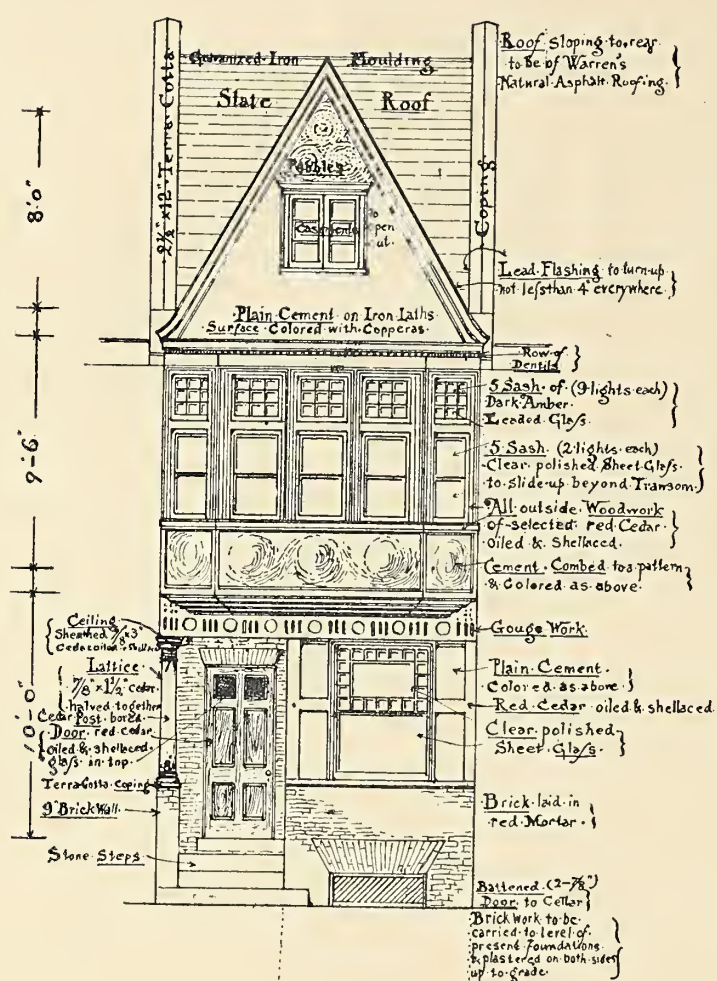


FRONT VIEW.

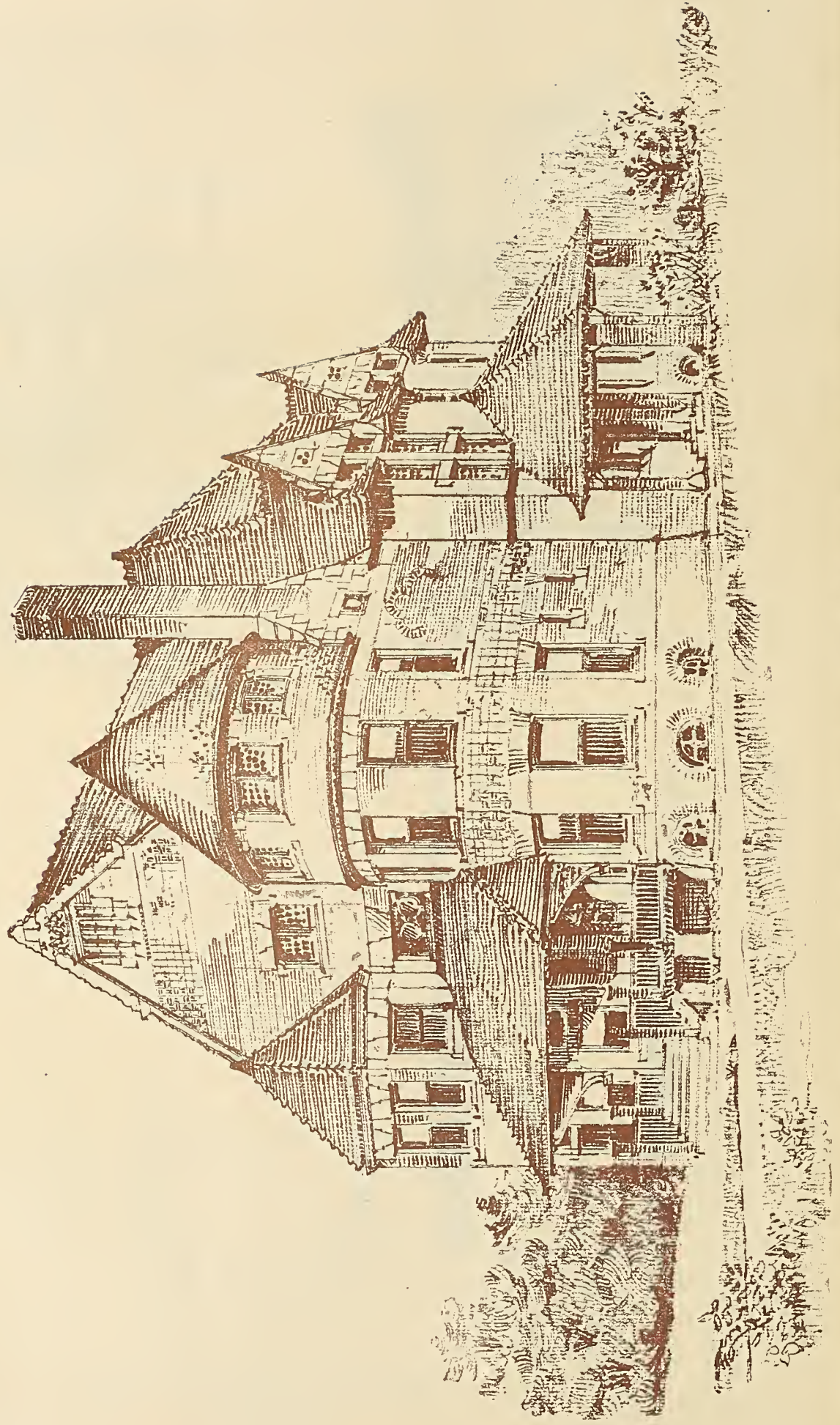


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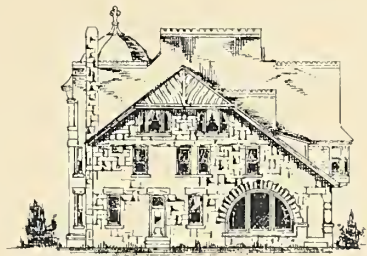
RESIDENCE DESIGN—NORTHEAST VIEW.—TREAT & FOLTZ, Architects, Chicago.



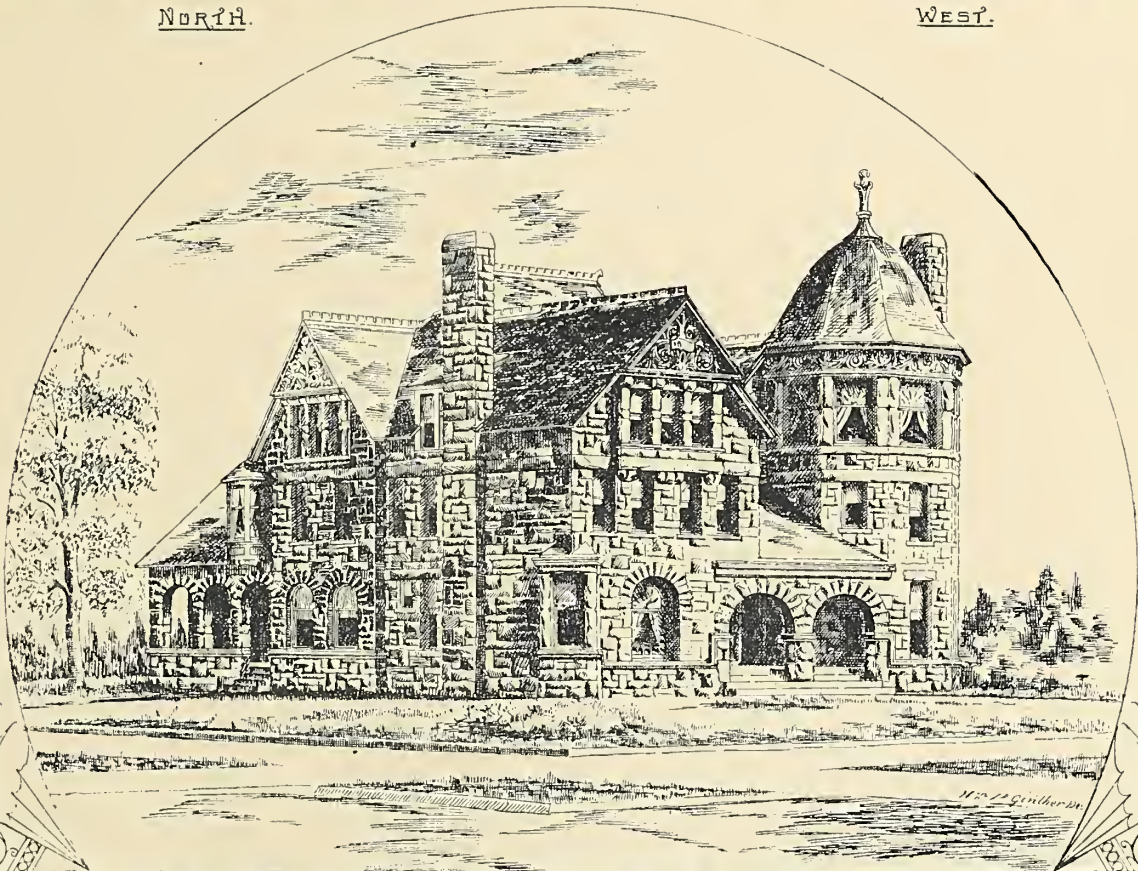
RESIDENCE FOR C. L. HUTCHINSON, CHICAGO.—BURLING & WHITEHOUSE, Architects.



NORTH.



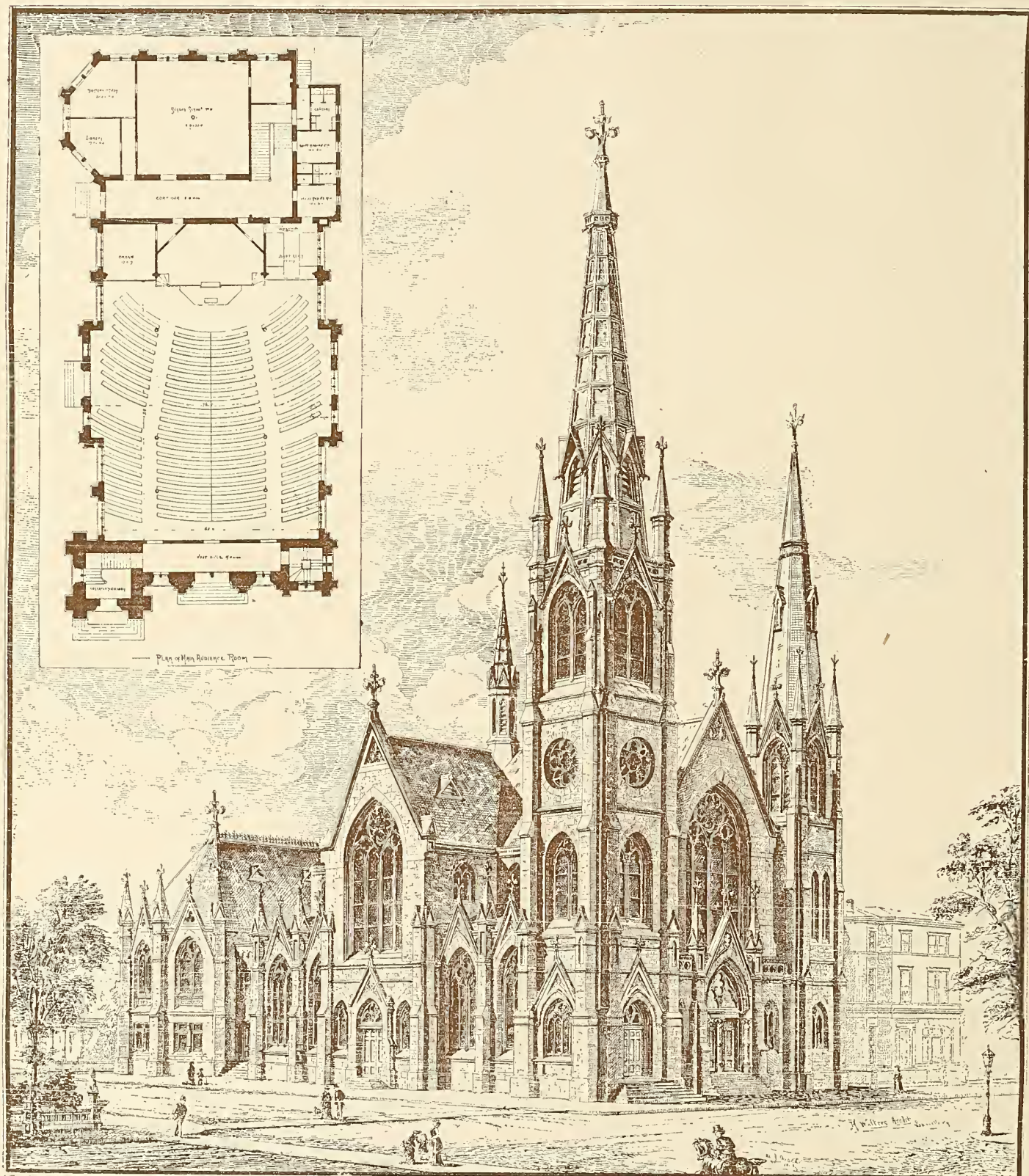
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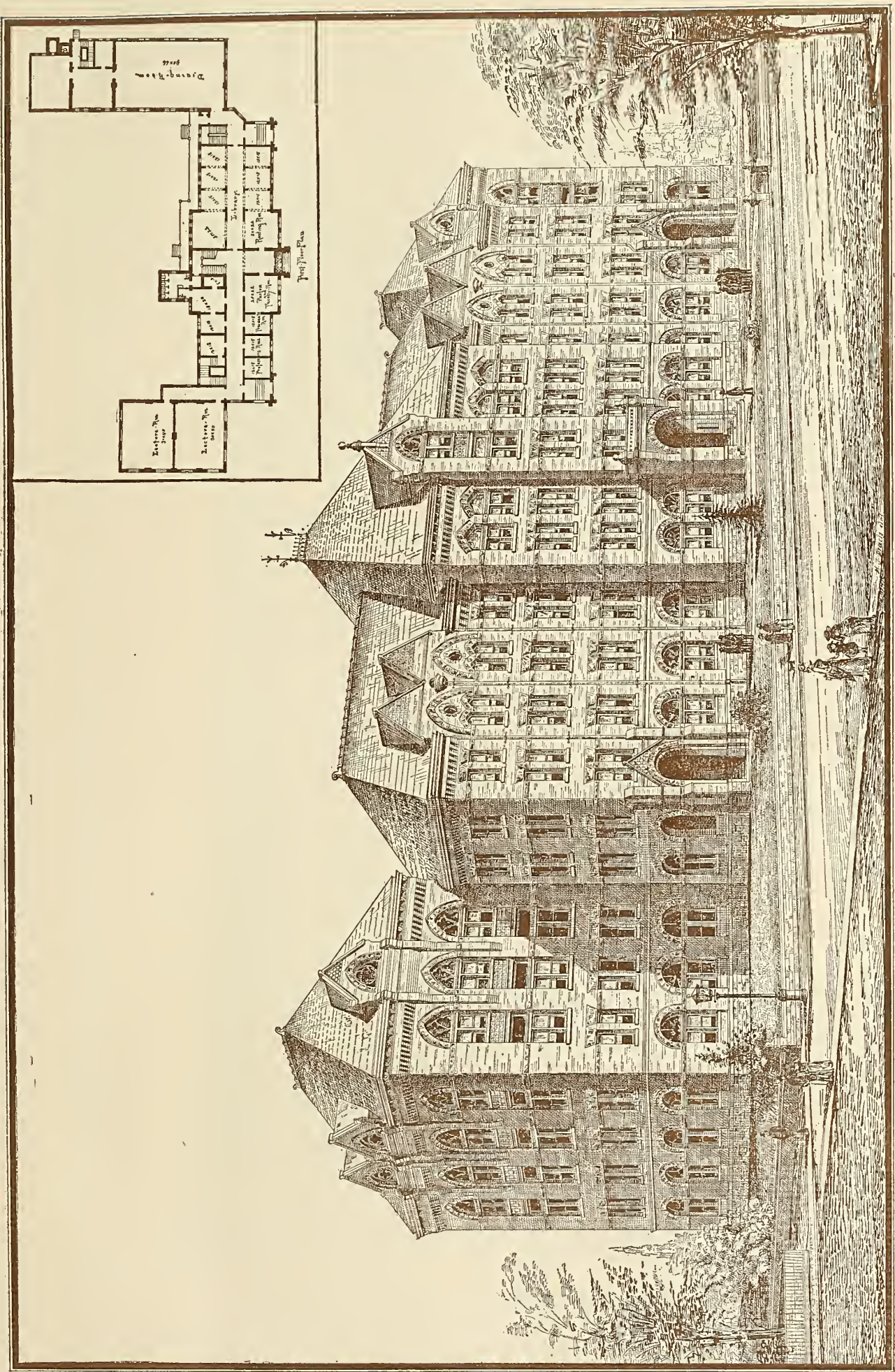
R. O. WEARY
&
G. W. HAMMER
ARCHITECTS



FOURTH STREET BAPTIST CHURCH, LOUISVILLE, KY.

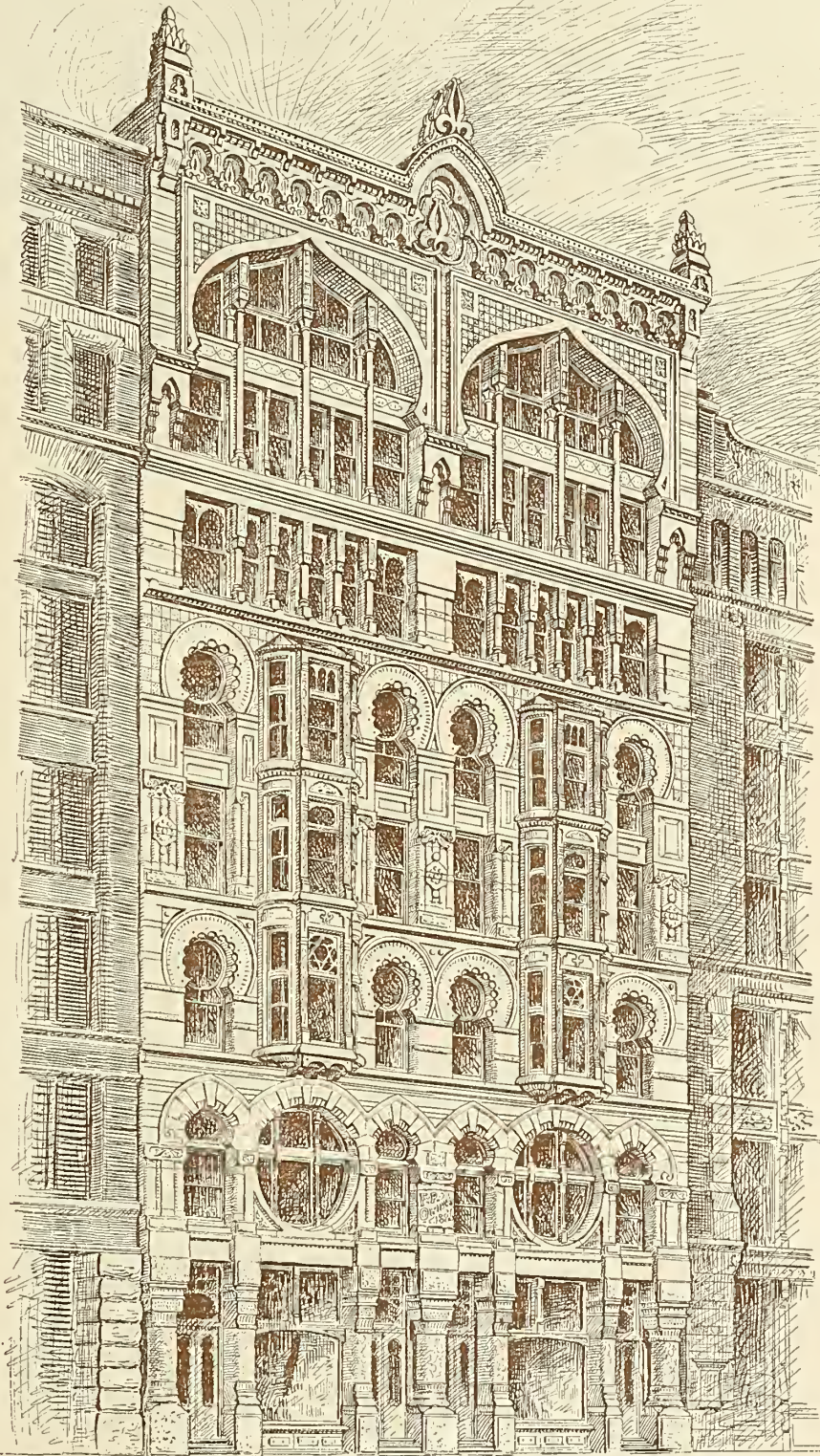
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A MONTHLY JOURNAL (WITH AN INTERMEDIATE NEWS NUMBER) DEVOTED TO WESTERN INTERESTS.

VOL. IX.—No. 2.

CHICAGO, FEBRUARY, 1887.

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INTERMEDIATE NEWS NUMBER,

DEVOTED TO

ASSOCIATION AND BUILDING NEWS.

PUBLISHED BY

THE INLAND PUBLISHING COMPANY,

CHICAGO, ILL.

IN the formation of state associations there has seemed to be a hesitancy on the part of those who have the matter in charge regarding the proper status of those admitted to membership. The committee appointed to form a state association of Tennessee have taken an advanced view of this, and incorporated it in the following circular letter, which, while calling for a meeting of architects, states distinctly who shall be considered eligible to membership in the association:

NASHVILLE, Tenn., February 3, 1887.
Believing that a meeting for conference, and the discussion of matters relative to the practice of the profession of architecture in this state, would greatly promote the interests and welfare of the architects in the State of Tennessee, the undersigned hereby invite and earnestly request you to meet with them in a state convention, to be held at the Maxwell House, at Nashville, Tenn., on Thursday, February 24, 1887, for the consideration of such matters as may be presented on that occasion.

Only those who devote their time exclusively to the practice of architecture will be considered eligible to a seat in said convention. Practicing architects, who take building contracts as well, will not be eligible.

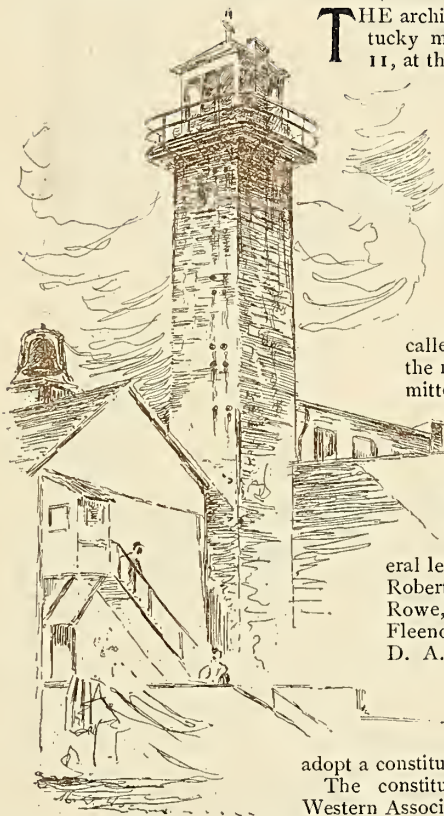
Please notify either of the undersigned at your earliest convenience, of your purpose to attend.

WM. C. SMITH, F. A. I. A.
GEO. W. THOMPSON, F. W. A. A.

The committee are to be congratulated upon thus early carrying out the duty it was appointed to perform, and their circular should stand as a model for other states to follow when calling conventions for the same purpose.

THE Andrew Carnegie library competition has been decided in favor of the designs submitted by Smithmeyer & Pelz, of Washington, D. C. There were six paid competitors, Messrs. Shapley, Ruttan and Coolidge, Brookline, Mass. (successors to H. H. Richardson), James W. McLaughlin, of Cincinnati; Smithmeyer & Pelz, Washington, D. C.; Cyrus L. W. Eidlitz, New York, and George B. Post, New York. There were eighteen voluntary contributions sent in, and no expert was employed to make a selection, Mr. Carnegie reserving that important office to himself. The building is designed to cost \$500,000.

Kentucky State Association of Architects.



THE architects of the State of Kentucky met at Louisville, February 11, at the office of McDonald Bros.

Among those present were: C. A. Curtin, Kenneth McDonald, Donald McDonald, Henry Wolters, M. Q. Wilson, Mason Maury, O. C. Wehle and Henry Neb. The INLAND ARCHITECT was represented by R. C. McLean.

The meeting was called to order by C. A. Curtin, the member of the State Committee of Organization appointed by the Western Association; O. C. Wehle was secretary, these being the officers of the former meeting for temporary organization.

The secretary read several letters from absent architects, Robert Boyd, of Paducah, H. L. Rowe, of Lexington, Johnson and Fleenor, of Bowling Green, and D. A. McKinnon, of Paducah.

The report was accepted and the letters placed on file.

It was resolved to adopt a constitution and by-laws.

The constitution and by-laws of the Western Association of Architects was first read by the secretary, then those of Missouri

and Wisconsin state associations.

The different sections were discussed. Sections 2 and 3 of Missouri, regarding membership, admitting architects as follows: active members, associates, engineers, etc., juniors, draughtsmen, etc. Section 8 of the W. A. A. was adopted, defining the status of an architect.

The remainder of the constitution and by-laws were made up from the Wisconsin rules with slight changes, and, as a whole, the formation is similar to that of other state associations.

The annual dues of an active member residing in Louisville are \$10; in the state at large, \$5; associate, \$5; junior, \$2.50.

Four members can transact business at a regular meeting.

A letter of regret was received from H. P. McDonald, who was confined to the house by sickness.

The election of officers being called for, there were placed in nomination for the office of president: C. J. Clark, Henry Wolters, Mason Morey, Kenneth McDonald, C. A. Curtin and H. P. McDonald.

H. P. McDonald was elected president.

O. C. Wehle was elected secretary and treasurer by a unanimous vote.

Henry Wolters was elected first vice-president.

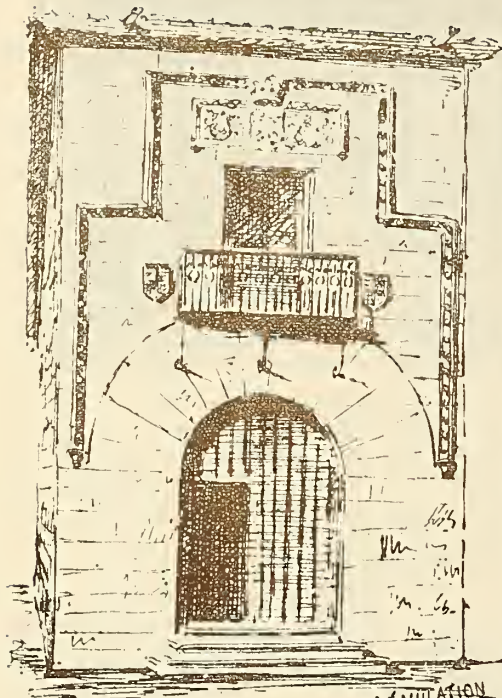
Mason Morey second vice-president.

These officers constitute the board of directors, with one addition; to fill this C. J. Clark was elected.

A committee of three, consisting of Mason, Morey, C. A. Curtin and Kenneth McDonald, was appointed to review the constitution and by-laws, and the work of formation generally, and prepare suggestions in regard to the same, to be presented at a special meeting called for February 25, at the same place. The meeting adjourned.

The association will meet monthly, on the first Thursday in the month, and for the present at the office of McDonald Bros., at Louisville.

Texas State Association of Architects.



THE second annual convention of the Texas State Association of Architects was held at Austin, January 18 and 19.

Convention called to order by President J. J. Kane at 10:30 A. M., fourteen members being present.

The report of the Executive Committee was called for, and, by request, they were allowed further time. Pending their report, the convention adjourned to 3 P. M., when the convention was again called to order, President Kane in the chair.

The following is a complete roll of members in good standing:

J. Larmour, S. A. J. Preston, J. N. Preston, John Andrewartha, and A. M. C. Nixon, of Austin; J. J. Kane and F. W. Kane, of Fort Worth; N. Tobey, N. J. Clayton and W. H. Tyndall, of Galveston; E. T. Heiner of Houston; Oscar Ruffini, Alfred Giles, James Wahrenberger and Albert F. Beckmann, of San Antonio; W. C. Dodson, W. W. Dudley, Samuel P. Herbert and W. W. Larmour, of Waco.

The following is the report of the Executive Committee:

FINANCES.

Cash received from all sources.....	\$170 00
Cash paid out by secretary.....	\$70 95
Cash paid out by Chairman Executive Committee.....	14 50—85 45
Balance on hand.....	\$ 84 55
In hands of treasurer.....	\$80 50
In hands of secretary.....	4 05—84 55

The following action of the Executive Committee was reported:

To the Texas State Association of Architects:

At an executive session held at Meridian, Bosque county, February 23, 1886; present, John Andrewartha, chairman association; J. E. Flanders, Dallas; W. C. Dodson, Waco; A. B. Bristol, Dallas; J. J. Kane, president and *ex-officio*, Fort Worth; it was resolved that the chairman of the Executive Committee of the Texas State Association of Architects be, and is hereby authorized to represent to the Commissioners Court of Bosque county, now in session to select plans and bids for a court house, that the architects present are not prepared, and would not meet contractors in competition on selection of plans for public or private buildings. That all precedents and true practice in the profession of building forbids it, as being unfair, partial, demoralizing, and financially disadvantageous to the county or parties so doing, and the code of rules and practice of architects, throughout the United States forbids any such practices as have lately been pursued by contractors before Commissioners Courts, and others, and pray the Commissioners Court of Bosque county not to countenance such practice as accepting contractors' bids on their own plans, at their own price. And in the event of the court considering plans through the contractors, then the architects present will withhold their plans from competition.

(Signed)

JOHN ANDREWARTHA, Chairman.
J. E. FLANDERS, Mem. Ex. Com.
W. C. DODSON, Mem. Ex. Com.
J. J. KANE, President Association.

After hearing a discussion pro and con, the Commissioners Court decided to sustain the architects and reject the contractors.

The Executive Committee admitted to membership in the association Mr. S. P. Herbert, of Waco, recommended by Messrs. W. W. Larmour and W. C. Dodson.

The committee also reported, for the consideration of the members of the association, "An act regulating the practice of architecture in the state of Texas," formulated by the Western Association of Architects, which was read and approved.

The Executive Committee was authorized to have printed 1,000 copies of the "bill."

On motion, the convention adjourned to Wednesday, at 10:30 A. M.

WEDNESDAY, JANUARY 19—MORNING SESSION.

Meeting called to order by the president.

Mr. N. Tobey, in behalf of Mr. Wilke, capitol contractor, extended an invitation to the association to visit the granite quarries at Burnet. Mr. Heiner moved that the invitation be accepted. Mr. Dodson offered the following amendment: "That the thanks of the association be extended Mr. Wilkie for his courtesy, but that the invitation be declined." The amendment was adopted.

On motion, the convention adjourned to 2:30 P. M.

At the afternoon session the meeting was called to order by the president. Moved by Mr. Dodson, that the president appoint two committees, of three members each, to nominate officers for the ensuing year, and also the place for holding the next convention. Carried.

Committee No. 1.—Messrs J. & W. W. Larmour and N. Tobey.

Committee No. 2.—Messrs. Dodson, Heiner and Clayton.

A recess was taken to allow the committees to report.

Committee No. 1 reported: For president, J. J. Kane, Fort Worth; for first vice-president, J. N. Preston, Austin; for second vice-president, Nathaniel Tobey, Galveston; for secretary, S. A. J. Preston, Austin; for treasurer, W. W. Larmour, Waco; for Board of Trustees, E. T. Heiner, Houston; chairman, W. C. Dodson, Waco; J. Wahrenberger, San Antonio; N. J. Clayton, Galveston; John Andrewartha, Austin. Place of next meeting, Houston.

Committee No. 2 reported: For president, J. J. Kane, Fort Worth; for first vice-president, J. N. Preston, Austin; for second vice-president, Nathaniel Tobey, Galveston; for secretary, S. A. J. Preston, Austin; for treasurer, W. W. Larmour, Waco; for Board of Trustees, W. C. Dodson, Waco, chairman; E. T. Heiner, Houston; N. J. Clayton, Galveston; J. Wahrenberger, San Antonio; J. Larmour, Austin. Place of next meeting, Houston.

On motion, the secretary was instructed to cast one ballot for the convention for the first five candidates nominated in report No. 1, which was done, and the officers declared elected.

The secretary was also instructed to cast one ballot for each of the five candidates nominated for board of trustees in report No. 2.

Mr. Heiner moved a substitute, that "the convention ballot for each member of the board of trustees."

The substitute was adopted.

Messrs. Dodson, Heiner, Clayton and Wahrenberger each received 11 votes.

Mr. Andrewartha received 2 votes, Mr. Larmour 8, and scattering 1.

Mr. Larmour was declared elected a member of the board of trustees. On motion, the vote was made unanimous. It was also decided unanimously that the next convention be held at Houston.

On motion of Mr. Nixon, and seconded by Mr. Heiner, the president appointed a committee of three to revise the by-laws, and report at the next annual meeting. Messrs. Nixon, Clayton and Heiner were appointed.

By request, Mr. Clayton was excused from acting on the committee, and Mr. S. P. Herbert, of Waco, was appointed in his place.

Mr. Wahrenberger presented the following communication from the Texas Society of Engineers:

SAN ANTONIO, Texas.

At a meeting of the Texas Society of Engineers, held January 4, 1887, the following motion was made by the president, Mr. C. P. Matlack, and indorsed by the members present:

Recognizing the fact that it is desirable to secure, by legislation, the protection in the practice of architecture, engineering and kindred professions, be it

Resolved, by the Texas Society of Engineers, That we stand ready to indorse any measures that may be taken with such an object in view, and to give our assistance in every way practicable.

A. HAVILAND, Secretary T. S. of E's.

Moved by Mr. Heiner, that the communication be received and ordered spread on the minutes, and that the secretary be instructed to extend to the Texas Society of Engineers the thanks of our association. Carried.

On motion, the secretary was ordered to have printed five hundred copies of the proceedings of the convention, the roll of membership, and schedule of charges of the association.

Moved by Mr. Wahrenberger, that \$50, or so much thereof as may be necessary, be appropriated to pay for printing the proceedings, etc., and also for printing the one thousand copies of "Bill Regulating the Practice of Architecture," the balance, if any, to be used for incidental expenses of the Association. Carried.

The following report was received from the Executive Committee, and, on motion of Mr. Tobey, was adopted, and ordered spread on the minutes:

Mr. J. J. Kane, President Texas State Association of Architects:

DEAR SIR,—Your Executive Committee report the following resolution adopted by them:

WHEREAS, This committee has received information of a charge of unprofessional practice on the part of Alfred Giles; therefore, be it

Resolved, That Mr. Giles be, and he is, hereby suspended as a fellow of this association until after his vindication of the charges now rest ng against him in connection with the building of the El Paso court house.

Respectfully submitted,

W. C. DODSON, Chairman.

The following resolution, introduced by Mr. Heiner, was indorsed and ordered spread on the minutes:

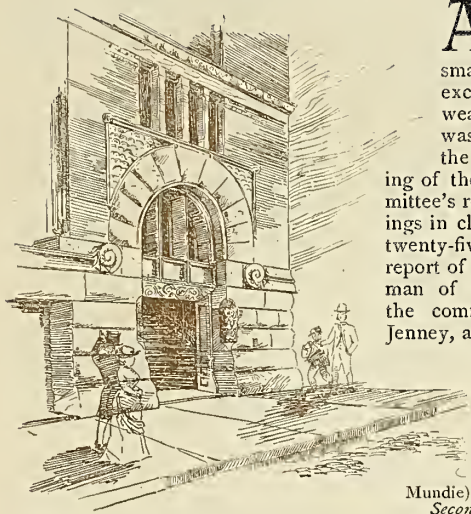
Resolved, That it be required of every fellow of this association to report to the Executive Committee any deviation from the schedule of charges of this association by any member thereof.

On motion, a vote of thanks was tendered Mr. S. E. McIlhenny for the use of the parlors of the Driskill house, and also to the Capital Business College for the use of their rooms.

On motion of Mr. Dodson, the convention adjourned *sine die*.

Up to the fourteenth century I very much question whether that desideratum of ecclesiologists, an open roof, ever obtained in churches. Look at ancient twelfth and thirteenth century buildings that have not been restored, and you will find an hexagonal ceiling, the said ceiling in many places replacing the old boarding; but in some poor places, as in the little Sussex churches, it may just as likely have been original. In many instances the ceiling was even flat, or very slightly canted, as at Peterborough, Jesus College, Cambridge, and, I believe, Adel Church. Now, this boarding was useful in two ways: it afforded a surface for decoration, and it kept the church cool in summer and warm in winter. There was also a small window high up in the gable, to ventilate the air between the ceiling and roof. In our modern open roofs we have just the reverse; they are frightfully hot in summer, and cold in winter. Go into a church after a Sunday afternoon service, and observe how close it smells. Our modern architects put the little window in the gable because they find it there in the old examples; but with them it is of no earthly use but to afford light where light is not wanted, and to show the thin scantling of their timbers.—William Burges.

Chicago Architectural Sketch Club.



ENTRANCE TO COUNSELMAN BUILDING

JANUARY ST.

from Pencil sketch.
J. L. H. H. H.

first place to "Amazon." The competition is of very unusual interest, and marks a distinct step in advance, upon which I congratulate the sketch club.

I took the liberty of sending the drawings to the last monthly meeting of the Illinois State Association, where they were subjected to close criticism, and were generally admired. I inclose the note of Mr. Jenney on his choice.

Very truly yours,

JOHN W. ROOT,
Chairman Adjudicating Committee; C. A. S. C.

Mr. Jenney's individual comment upon the different drawings are interesting, and are as follows:

CHICAGO, February 9, 1887.

John W. Root, Esq., Chairman:

DEAR SIR,—In reply to yours of this date, I have examined the drawings submitted for a 25-foot front, and would report as follows:

First, "Number 459" (W. B. Mundie).

Well drawn. Unfortunately without a section. The windows of second story are too short, and the little panels on either side of the second story triple windows are trifling. I would have liked it better if the middle second story window was widened, and the small panels omitted entirely.

Second, "A Westward Ho" (W. R. Rae).

The details not as well drawn as "Amazon," but is more practical and original. First story is darkened by the loggia, but not as badly as "Amazon."

Third, "Amazon" (R. M. Turner).

Well drawn. The carving well designed and well drawn. The first story front room must be dark, and deprived of the view of the street. The stone transoms in windows above first story, although picturesque, are not practical, and although seen in several buildings, are, I believe, universally declared undesirable in a dwelling house. The chimney is unnecessary, and disfigures the elevation, still I would give this drawing the third place.

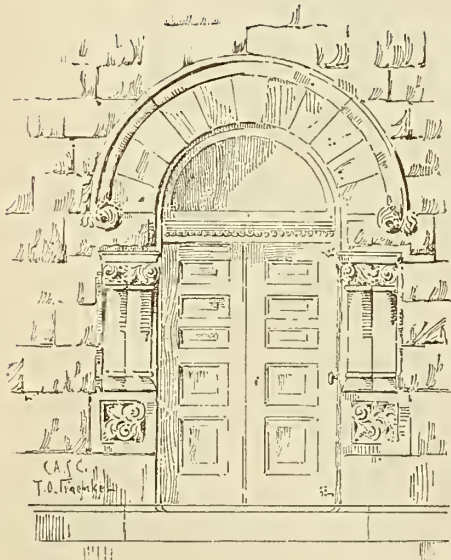
"Domus" (Richard Wood), and "Snider" (H. O. Fraenkel), make no use of the roof story, and I think generally show less ability than the three I have selected.

Yours very truly,

W. L. B. JENNEY.

The next meeting, February 28, will be most interesting. A paper will be read on "Heating and Ventilation Demonstrated," by W. M. Green, and the drawings in the competition for a three-room village school-house will be submitted.

Chicago Builders' and Traders' Exchange.

C. A. S. C.
J. L. H. H. H.

THE work of the Committee on Ways and Means is being vigorously pushed. At its last meeting the reports from the Finance and Entertainment Committees were received, and those committees given further time. While that of the Entertainment Committee was not finally adopted, the probability is that the convention will be held at the Grand Pacific Hotel, and also the banquet, which will be given on the evening of the third day of the convention. Messrs. Alex. W. Murray and W. T. Cushing were added to the Sub-Committee on Finance.

In pursuance to the resolution passed upon at the annual meeting of

the Exchange upon the subject, the building committee of three appointed to look up the law and other matters in the event of the Exchange erecting a building, the committee have made the investigations ordered, and a special meeting is called for Saturday, February 26, to hear the committee's report.

Among the firms applying for membership in the Exchange this month are: James Sinclair, stone; Perkins Bros., painters; Hadfield & Co., lime; Bouton Foundry Company, architectural iron; Edward Lyman, lime; Michael White & Son, excavators; J. L. Hathaway, coal and wood. The following circular letter has been issued, which shows the condition of the financial side of the work of the Ways and Means Committee in preparing for the coming convention of Master Builders:

BUILDERS' AND TRADERS' EXCHANGE,
CHICAGO, February 19, 1887.

DEAR SIR,—We wish to call your attention to the urgent necessity of pushing the collection of subscriptions for the Entertainment Fund of National Master Builders' Convention.

This far about one-half the necessary amount has been subscribed, and it has been ordered by the Committee on Ways and Means that subscription books be returned to the secretary by March 1.

We trust that the amount needed may be collected by that time, and we urge that a thorough canvass of all interested parties be made at once.

Respectfully,

WM. GRACE, W. P. KETCHAM, J. B. SULLIVAN, E. T. CUSHING, A. W. MURRAY.	} Finance Committee.

On February 17 the Exchange was honored by a visit from W. H. Sayward, the president of the Boston Master Builders' Association, who is secretary of the temporary organization for forming the National Association of Master Builders. He was the guest of George C. Prussing, who holds the office of president in the temporary organization. Mr. Sayward has visited the cities of New York, Philadelphia, Washington, and was on his way to Cincinnati, and reported that the movement is not only interesting to builders in those cities, but that it is causing the formation of builders' exchanges throughout the country.

Association Notes.

ARCHITECTURAL ASSOCIATION OF MINNESOTA.

The regular monthly meeting of the association was held at the Ryan Hotel, St. Paul, February 1. Among the guests present were Mr. F. L. Stetson, chief of Minneapolis fire department, and Mr. L. H. Moore.

The following committees were reported by the Board of Management:

Committee on Membership: D. W. Millard, C. F. Struck, and, *ex officio*, E. P. Bassford, George M. Goodwin and F. G. Corser.

Committee on Library Education and Publication: F. G. Corser, A. F. Guager, W. C. Whitney.

Committee on Meetings and Entertainment: E. P. Bassford, *ex officio*, George M. Goodwin, D. W. Millard, C. F. Struck and E. E. Joralemon.

Special Committee on Legislation: I. Hodgson, F. B. Long, E. P. Bassford and F. G. Corser.

Mr. W. J. Freaney, who was to read a paper on trap siphonage, was not present on account of sickness. His paper will be read at a future meeting. The report of the committee in charge of the annual banquet was received, and the thanks of the association extended for its efficient work.

Mr. L. H. Moore, president of the Pipestone Quarry Co., was present, and showed some fine samples of redstone, and also made some interesting remarks on the quarries.

The resignation of Mr. John Teltz, from the Board of Management, was received and accepted. Mr. Teltz is about to retire from practice and assigned this as the reason for his resignation. C. A. Wallingford was elected to fill the vacancy.

Secretary Corser read the Western Association's draft of a bill to regulate the practice of architecture by registration or license. A long discussion followed, and resulted in the acceptance of a substitute bill, offered by Mr. Corser, and which had been drafted after a conference with members of the association, prior to the meeting.

Mr. Millard offered the following resolution, which was passed by a unanimous vote:

Resolved, That in the sense of this meeting any law requiring a license by architects as a condition of practicing in this state should be general in its application to all persons practicing in the state.

Mr. Goodwin moved that the act offered as a substitute for the act proposed by the Western Association of Architects, be submitted to the Committee on Legislation and that they, with the cooperation of the Board of Management, place the act with such amendments or alterations as they see fit, before the legislature as soon as possible. The motion was carried.

After discussing a bill regarding fire-escapes, now before the legislature, and passing a resolution recommending an amendment, and also passing a resolution ordering a revision of the roll by the membership committee, and make report at the next regular meeting upon all names upon it of members who are ineligible as fellows, associates or juniors, the meeting adjourned.

CUTSTONE AND QUARRY OWNERS' ASSOCIATION OF CHICAGO.

Two committees of three each, representing the cutstone contractors and the quarry owners, met, February 18, to consider the reorganization of the association of cutstone contractors, in order to admit the quarry owners. The committee of cutstone contractors were Toney Denier, W. Bolderwick and John Worthy. The committee of stone dealers were David Reed, B. J. Moore, and W. B. Lord. After a general consultation and exposition of the plan of organization by W. B. Lord and others, the existing constitution and by-laws of the Cutstone Contractors' Association was modified to serve the purposes of the new association.

Three representatives of the quarry interests are to be added to the existing executive committee.

A board of arbitration is to be established, to be composed of three cutstone and three quarry representatives, and the present secretary of the association.

No stone except curbing and rubble stone will be sold by any quarry owner to any except members of the association. A cutstone contractor will figure no cutstone work for a mason contractor above \$500.

Each quarry representative is to furnish a printed price list of the prices of each and every variety of stone represented, which prices are to be adhered to during the current year. No cutstone will be figured unless a cutstone diagram is furnished.

This synopsis of the modification of the constitution and by-laws will be brought before a general meeting of cutstone contractors for final action.

ARCHITECTURAL ASSOCIATION OF IOWA.

In our report of the annual meeting of this association, an error made the secretary G. B. Baldwin, of Sioux City. The secretary is F. D. Hyde, of Dubuque.

Synopsis of Building News.

Burlington, Iowa.—Architect C. A. Dunham reports: Court house, 107 by 74 feet, two stories, brick, trimmed with cutstone and terra-cotta; cost \$60,000; without furniture or heating apparatus, to be commenced early in the season of '87.

Cheyenne, Wyo. Ter.—The Union Pacific Railway Company is to build a hotel here, costing \$25,000.

Chicago.—With regard to the outlook, there has nothing transpired since our last issue to change the report then made, viz., that architects are generally busy in designing and preparing plans for projected buildings, and the prospect is more flattering than at this time last year; but it is yet too early to speak definitely as to what is likely to be accomplished in the way of new building.

Architect A. Druiding reports: Plans for St. Lawrence Catholic Church, to be built at Ironton, O., 134 by 54 feet, with 84 feet transept; in Renaissance style, with two towers, brick, with stone trimmings, slate roof, heated by steam; cost \$24,000. Also for convent near Milwaukee, four-story, 296 by 80 feet, including chapel, 42 by 80 feet; pressed brick with stone trimmings; cost \$100,000.

Architects Edbrooke & Burnham report: Plans four-story and basement store and office building for F. Gazzolo, to be erected southwest corner Madison and Jefferson streets; front to be of buff sandstone, iron and plate glass; cost \$25,000. For three handsome two-story dwellings, to be erected on Forty-first street; pressed brick fronts, trimmed with terra-cotta and buff Bedford stone, hardwood mantels, electric bells and modern sanitary arrangements; cost \$12,000. Also for frame residence to be erected by J. C. Lewis on Forty-second street; cost \$4,500. Also two-story frame dwelling for H. E. R. Wood, to be erected on Fifty-fourth place, Hyde Park.

Architect H. F. Starbuck reports: Plans for a new school building, to be erected at Hegewish; to be two stories, 80 by 80 feet, containing eight rooms; construction to be of brick with stone trimmings; heated by Ruttan system; cost \$20,000. Also preparing plans for an Episcopal church at Freeport, Ill.; construction stone; cost \$15,000.

Architect J. Zittel reports: Preparing plans for three-story flat, 50 by 70 feet, to be built by S. Gessler, on Huron street; front to be of pressed brick with Lemont stone trimmings; cost \$30,000.

Architect H. Rehboldt reports: Plans for a four-story and basement hotel building, 81 by 60 feet, to be built by F. Wistawill, on Wells street, construction, Anderson pressed brick, with terra-cotta and stone trimmings, hardwood floors, slate tiling in office, stained and plate glass, steam heat, elevators, etc.; cost \$30,000.

Architect W. G. Barfield is receiving estimates on a three-story flat, 125 by 50 feet; to be erected by John O'Malley on Thirty-seventh street; front to be of pressed brick with stone trimmings; cost \$22,000.

Architect J. D. Long reports: Plans for Presbyterian church at Englewood, 70 by 150 feet, of pressed brick, with stone and terra-cotta trimmings, steam heat; cost \$30,000. Also for three-story, 86 by 120 feet, depot for the C. K. & N. R. R. at Topeka, Kan.; upper stories to be used for company's offices; cost \$50,000. Also under way for two-story pressed brick dwelling, hardwood interiors, steam heat; to be erected by G. E. Mogg on Forty-ninth street; cost \$4,000.

Architect E. R. Krause reports: Contracts let for three-story and basement flat, 30 by 71 feet, to be built on West Twelfth street, by F. Lehman, construction of pressed brick with stone trimmings, galvanized iron cornice, plate and stained glass, etc.; cost \$8,000. Three three-story dwellings on Scott street, for W. F. Roos, construction, pressed brick, stone, and galvanized iron trimmings, hardwood interiors, furnaces, etc.; cost \$15,000; under way. Plans for two-story flat building, 23 by 61 feet, for H. Kosten, Lake View, construction to be of pressed brick and stone, slate roof, furnace, etc.; cost \$5,500. Also for frame residence at Evanston, for A. Kosper; cost \$6,000.

Architect H. R. Wilson reports: Receiving estimates for six two-story dwellings to be built on San Francisco street, construction, pressed brick and stone, stained and plate glass, furnaces, etc.; cost \$21,000.

Architect W. H. Drake reports: Taking figures on six-story warehouse, 40 by 90 feet, to be erected in rear of 218-220 Washington street, construction, common brick, iron columns, elevators, etc.; cost \$20,000.

Denver, Col.—Architect D. McD. Graham reports: Prospects for the coming year good at present; anticipate a moderate boom, however. We have all the labor sufficient for all purposes, so would not encourage many to come on account of prospective building activity.

Dauville, Ill.—Architects Moore & McCoy report: Residences for D. Gidchings; cost \$4,200; M. M. McNeil; cost \$3,000; M. Minnick; cost \$4,500; M. E. Church building; cost \$40,000.

Duluth, Minn.—A syndicate at the head of which is W. W. Spaulding, project a six-story hotel building, 200 by 120 feet, to be built of Fond du Lac brown sandstone; to cost in the neighborhood of \$400,000, or \$500,000. It is proposed to commence the erection early in the spring; no architect has been yet engaged.

Evansville, Ind.—Architects Reid Bros. report: Outlook for the coming season very flattering, and unless strikes or other drawbacks occur, will be an exceptionally good year in this city.

For Conrad Beach Co., San Diego, Cal., hotel, 500 rooms; fronts 460 feet each, with open court in center; foundation, concrete; first, granite; superstructure, frame; slate roof; cost \$300,000; under way. Chas. Viele, chapel for St. Paul's church, 28 by 44 feet; stone walls, slate roof, oak finish; cost \$5,000; projected. Same, rectory for St. Paul's church; 25 by 80 feet; remodeling; brick, slate roof, two stories; cost \$2,500; projected. Dr. J. H. Schloff, store; 25 by 58 feet; remodeling; pressed brick and terra-cotta, tile roof, three stories; cost \$10,000; projected.

Moline, Ill.—Architect J. W. Ross, of Davenport, Iowa, has prepared plans for a brick school building; cost \$20,000; building not yet under way; M. Donahue, contractor.

St. Louis, Mo.—Architect J. B. Legg reports plans for a 12-room cottage, modern gothic style, pressed brick with redstone trimmings and slate roof, for F. Hill, Esq., of Carthage, Mo.; cost \$12,000. At St. Louis, for P. Johnson, a 9-room frame dwelling; cost \$6,000. For D. W. Pratt, same place, a dwelling; to cost \$4,000.

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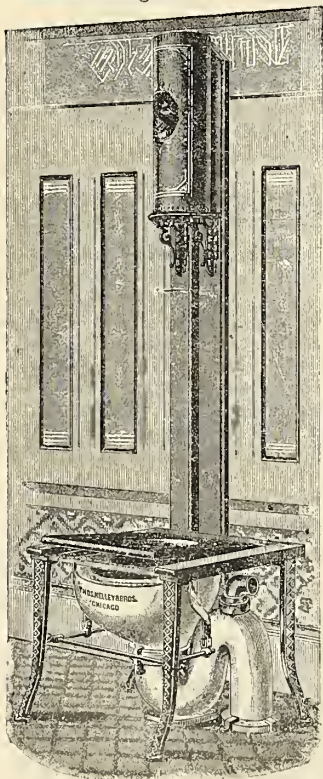
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WITH this number, subscribers to the photogravure edition will receive the first set of plates, which are confined to reproductions of a high class of Chicago residences. In future numbers, besides residences, we shall give views of office buildings, schools, churches, store-fronts, interiors, etc., aiming in our selections to give the best examples of each, without regard to locality.

STATE associations were formed in Kentucky and Tennessee, in February, and complete the formation of all the western states except Michigan, and the southern, excepting those bordering on the gulf. Of these, Texas formed a year ago, and now word comes from Alabama, Georgia, and Louisiana, that movements looking toward formation are about to be inaugurated. The architects of western New York will shortly meet at Buffalo, in response to a call to be issued by the Buffalo Society, and even in California the best architects are contemplating the advantages of association, and a state meeting will probably be called before another issue of this journal. So rapid a consummation of a movement that three years ago was little more than a dream in the mind of, perhaps, a single individual, is one of the strongest of evidences that the Western Association of Architects, and the complete association by states was needed, and has been found most valuable by the profession, and next to that evidence of requirement is illustrated the earnestness and wisdom of those architects who have, and are now giving their best thought and energies to the work.

WE have from time to time brought before our readers the steps being taken to form a Canadian society of civil engineers, and we now take pleasure in announcing it as an accomplished fact. On the 24th of last month, a largely attended meeting was held in Montreal, on the anniversary of the first meeting held in Toronto, called by Alan Macdougall, to promote the society. The meeting was enthusiastic. The ballot resulted in placing Messrs. Thos. C. Keefer, C.M.G., Ottawa, as president; Walter Shanly, M.P., Montreal, Col. Gzowski, Toronto, John Kennedy, Montreal, vice-presidents; Prof. H. T. Bovey, Montreal, secretary-treasurer; Alan Macdougall, H. D. Lumsden, Toronto; H. F. Perley, H. N. Gisborne, Ottawa; W. L. Poole, Hellarton, N. B.; Hurd Peters, St. John, N. B.; S. Keefer, Rockville; W. T. Jennings, London; H. N. Ruttan, Winnipeg; P. W. St. George, E. P. Hannaford, H. Wallis, Prof. Sovey, L. Lesage, P. A. Peterson, Montreal, council. Montreal was chosen for headquarters, by a majority of three to one over Ottawa and Toronto. A pleasant *conversazione* was given by the resident members, in the Redpath Hall of McGill University, which was attended by a large and fashionable assemblage. Sir William Dawson, the venerable president of the university; Mr. Curran, M.P. for Montreal, and Mr. Kennedy, vice-president, delivered addresses of welcome. The roll of members starts with two hundred and eighty names, with numbers of applicants coming in daily. We learn that application is shortly to be made to parliament for an act of incorporation for the whole dominion. We extend to the young society our hearty good wishes for its prosperity. Its birth has taken place under the brightest auspices, and we hope it will live to a golden old age, and be a medium of benefit to one of the most learned and practical of all professions.

A CIRCULAR letter, which has been issued to architects of the cities of western New York, by the Buffalo Society of Architects, may need some explanation. The Buffalo society has already recognized the great value of organization locally, but there are many necessities arising in architectural practice which call for united action by the profession in the state, and this consultation is called for the consideration of these necessities, and the forming of a state association, not only to meet them, but for the general advancement of the profession. The circular reads as follows:

BUFFALO SOCIETY OF ARCHITECTS,
SECRETARY'S OFFICE, 57 CHAPIN BLOCK,
BUFFALO, N. Y., March 2, 1887.

The undersigned committee has been appointed to correspond with the architects of New York, regarding a convention to form a state architectural association.

Although our society has been organized less than one year, we think every member has been benefited by the more intimate acquaintance, and interchange of ideas; but we feel the need of a more extended organization, to enable us to deal with those questions of legislation which must sooner or later be brought before the profession.

We would respectfully solicit your opinion of the subject, both with regard to the time and place of meeting, should one be called, and the general character and scope of the organization.

Awaiting your early reply, we subscribe,

LOUISE BETHUNE,
CHARLES R. PERCIVAL,
W. W. CARLIN. } Committee.

The entire subject outlined in this circular should receive the careful consideration of the members of the profession it addresses, and any doubts regarding the benefits of a state association should be weighed against the fact that the separation of the profession, as a whole, and the lack of acquaintance, not to speak of united feeling and action, has been the cause of much mistrust between architects, and a lack of professional *esprit*.

NOTHING new has transpired in regard to the National Convention of Master Builders, to be held in Chicago on March 29, 30 and 31, except that the formation of exchanges, and the appointment of proper delegates, is occupying the attention of the craft east and west. Active preparations are being pushed forward in Chicago to give these delegates a royal reception, and the different sub-committees in charge of entertainment, hotels and railroads, etc., will have full arrangements completed before the day arrives. The delegates will register, as far as possible, at the Grand Pacific Hotel. The convention will be held at that hotel, and also the banquet will be given there on the evening of March 31. In cities where the formation of an exchange is not completed the work should be terminated at once, so that the master builders of each city will have full representation in this, to them, most important convention.

IT is probable that in many building contracts made this season a "strike clause" will be incorporated, by which the contractor is relieved from responsibility for delay caused by a strike of his workmen. The experience of several seasons has shown that, where there is no such provision, the workmen have it in their power to force the employer to an issue, in which the result is determined, not by the justice of their complaints, but by the predicament in which the employer is placed by a strike, which so delays fulfillment of his contract as to render him subject to the penalty for a violation of the time clause. To obviate this, owners and contractors have mutually agreed upon a saving clause, in case of delay caused by strikes, which will render futile any attempt to take advantage of the contractor in such a way and at such a time. This is a much needed concession from owners; but it should be pointed out that such a clause, unless carefully guarded, will prove a very convenient shield for an unscrupulous contractor who, seeing that it will be to his advantage for any reason to postpone the fulfillment of his contract, may so handle his workmen as to make a strike practically inevitable. Such a use of the

"strike clause" by a contractor may be prevented by placing with the architect the power to decide on the merits of the issue between the contractor and his men; and, in case he finds that the strike is the fault of the contractor, and kept in operation through his fault, to cause the contract to be canceled, or new men to be put on the work, as for any other unwarrantable delay.

ARCHITECT THOMAS WALSH, of St. Louis, has placed the architects of this country under a lasting obligation to himself, for contesting, single handed and alone, with a wealthy corporation, the principle that promises made by the promoters of a competition constitute a valid contract which the courts can and will enforce. This litigation has covered a period of three years, and was carried up to the supreme court of the state, which has rendered a decision sustaining the plaintiff in every particular. The facts are briefly these: In April, 1883, Mr. Walsh received a letter from the St. Louis Exposition and Music Hall Association, inviting him to submit plans for a building to cost \$400,000, in competition with other architects, on certain specified conditions. One of these conditions was that certain designs selected as superior to the rest should be premiated in the sum of \$500 each, but that "the architect who is successful shall not receive \$500, but he shall be engaged as architect and superintendent, and shall be paid for performing such duties, the usual commissions as adopted by the American Institute and the St. Louis Institute of Architects."

MR. WALSH notified the committee in writing of his acceptance of their invitation, and at the proper time and place he presented his drawings according to the instructions given. His design was pronounced the best of all submitted, but after considerable delay and negotiation with various parties, the directors decided not to engage Mr. Walsh as their architect and superintendent, but to employ one architect to make plans according to their instructions, to engage another architect to make the elevations and to intrust the superintendence to a building contractor who had secured their confidence. Mr. Walsh testified that he offered to perform the duties of architect and superintendent and declined other business in the expectation that the exposition work would engross all his attention. The association having refused so to employ him, he sued for five per cent on \$400,000, amounting to \$20,000, and was completely successful, the court of appeals and the supreme court both sustaining his plea.

THE defense set up by the St. Louis Exposition Association was, that their proposal had no binding force on them at all, being general and not addressed to any particular individual, and being "without consideration," also that their invitation to competitors was "so indefinite, uncertain and ambiguous that it can furnish no intelligible and certain basis for a contract." But the courts ruled that general proposals become particular as soon as their conditions are complied with by anyone, that the amount of time and skill applied by plaintiff in preparing his plans was as truly a "consideration" as anything else, and was amply sufficient to establish a contract, also that there was no questioning the interpretation which the exposition directors intended that competing architects should place on their artfully worded invitation, and such meaning would be sustained by the courts in the interest of public morals. Quoting Lord Mansfield on interpretation of contracts, it was ruled that "the basis of all dealings ought to be good faith."

DETROIT has been for some time agitated over the improvements of Belle Isle for park purposes, and the matter has attracted considerable attention in the country at large because Fred Law Olmstead, the well-known landscape architect, was first engaged as architect. We have taken considerable pains to ascertain as fully as possible the present status of the case, and the nature and amount of the proposed improvements. The island, which covers about 700 acres, is a most beautiful spot naturally, and is capable of being made one of the most attractive parks in the country. While we cannot learn officially that any specific appropriation was made for the entire carrying out of Mr. Olmstead's plans, as he only made preliminary studies, it is probable that only preliminary appropriations were made. In 1882, \$20,000 was appropriated; in 1883, \$25,000; in 1884, \$32,500; in 1885, none; in 1886, \$28,500. This total of \$106,000 has been used in carrying out a small part of Mr. Olmstead's plans on the lower end of the park. The sum Mr. Olmstead has received for services is \$6,000, with \$1,000 still unpaid.

MR. OLMSTEAD'S plans have now been abandoned, and future operations have been placed in the hands of Donaldson and Meiers, of Detroit, a firm of regular architects in good standing. They have already completed a very appropriately designed casino for the lower end of the park. There will be no appropriation asked for this year, as the park commissioners will have the proceeds of \$100,000 of city bonds, and with this money the architects expect to thoroughly drain the island from the lower to the upper end and get their general plan outlined. The improvements contemplate emphasizing the natural formation of the island, the drainage, cutting canals and small lakes, and laying out roadways in as natural a manner as possible and at a large saving in expense. One fine feature will be a boulevard around the entire circumference of the island. The abandonment of Mr. Olmstead's plans cannot detract from that architect's reputation, as that is too well established, and can only result in a loss of finish and elegance to the park; though it is satisfactory to know that since the work has been transferred it is placed in the hands of architects with some reputation for capability.

MR. GEORGE W. COPE, who has for a number of years been connected with, and, latterly, been the secretary of the American Iron and Steel Association at Philadelphia, has resigned that position and assumed the management of the Chicago office of the *Metal Worker* as resident associate editor. That journal modestly says:

Mr. Geo. W. Cope resigned the secretaryship of the American Iron and Steel Association at the beginning of the year, and has gone to Chicago as Resident Associate Editor of the *Metal Worker* in that city. The desirability of supplementing the efficient services of the manager of our Chicago branch office, Mr. J. K. Hanes, by such an addition to our staff, has been contemplated for some time, and we have waited Mr. Cope's convenience in resigning the important office he has so creditably and successfully filled. It was mutually desired that the change should inconvenience as little as possible the management of the American Iron and Steel Association, and for this reason Mr. Cope has postponed until now entering upon his new field of work. Mr. Cope's duties will be wholly editorial, and will involve no change in our established branch offices or their management. He is a brilliant journalist, with a wide personal acquaintance, and an intimate knowledge of the trades represented by the *Metal Worker*. We consider his acceptance of the important post to which he is assigned a cause for congratulation. We invite for him the confidence with which the editorial management of this journal has always been regarded, and trust that from personal contact with men and happenings in the West, he will be able to reflect western views and western interests more fully and ably than has ever been done in the columns of a trade newspaper.

In congratulating the *Metal Worker* upon this acquisition, which places it first in the list of journals devoted to the manufacture of and trade in metals in this country, we cannot but regret the loss sustained by the American Iron and Steel Association, the chief conservator, as well as the barometer, of the iron interest in the United States, the influence of which is felt in every country with which we sustain commercial relations. We bespeak for Mr. Cope a hearty welcome, not only because of the journal he represents, but because of his sterling qualities as a gentleman and a journalist.

The Disposal of Sewerage of Isolated Country Houses.*

BY WILLIAM PAUL GERHARD, C. E., CONSULTING ENGINEER FOR SANITARY WORKS.
(Continued from Vol. IX, No. 1.)

ANOTHER example of a constant round in Nature is afforded by the circulation going on between animal and vegetable life. Plants are nourished, and grow upon decomposed animal matter, effecting a change of those substances which might become dangerous to animal life, into harmless food substances for the roots of plants. The same plants, perhaps, form the nourishment for man and animals, and are again discarded to feed vegetation.

The whole process of water circulation has never been better described than in the words of Mr. F. O. Ward, at the General Congress of Hygiene, at Brussels, in 1856. These words, quoted by Mr. Edwin Chadwick, the Nestor of sanitary science in England, in an address on "Circulation or Stagnation," are as follows:

"The water which falls on the hills in a state of purity undergoes a natural process of filtration through sand, enters the rural collecting pipes, and passing through the aqueduct to the metropolitan distribution pipes, finds its way to every story of every house in the town; whence again, after having supplied the wants of the inhabitants, it runs off, enriched with fertilizing matter, which it carries away before allowing it time to ferment. This manure, driven along irrigation pipes, is deposited in the soil leaving the water to pass into drainage pipes, and flow on to the rivers. The rivers conduct it to the ocean, where it rises as vapor under the heat of the sun, to redescend as rain on the hills, enter again the collection pipes, and recommence its vast and useful course of circulation."

But let us return to the consideration of the application of sewage from isolated country houses to land. The conditions of successful application are a sufficiently large area of suitable, absorbent, well aerated, properly prepared and thoroughly underdrained soil. I should, perhaps, add to these a few other conditions, namely, the proper and judicious management, careful and equal distribution, and, before all, the *intermittent* application of sewage to the soil, which latter is so needed to insure its aëration.

The land selected for the purification of the sewage should not be located too near to a dwelling. In particular, if wells are used, it should be kept at a safe distance from them, the exact distance depending not so much on the configuration or slope of the surface as upon the inclination of the underground geological formation and strata.

We may distinguish several systems, namely, broad sewage irrigation, intermittent downward filtration and sub-surface irrigation. The Report of the Royal Commission on Metropolitan Sewage Discharge, published in 1884, defines broad irrigation as "the distribution of sewage over a large surface of ordinary agricultural ground, having in view a maximum growth of vegetation, consistent with due purification, for the amount of sewage supplied." The same report speaks of intermittent downward filtration as "the concentration of sewage at short intervals on an area of specially chosen porous ground, as small as will absorb and retain it, not excluding vegetation but making the produce of secondary importance." In the first system, the sewage flows principally *over* the land, in the latter system it passes *through* the land. Sub-surface irrigation is a modification of the filtration system, in which the sewage is distributed in a network of tile pipes, close under the surface of the ground, whereby all offense to sight or smell is at once overcome. It is obvious that this is an important consideration wherever sewage irrigation is to be practiced close to a dwelling house.

Broad irrigation requires very large areas of land. The land must not be continuously flooded, so that in order to manage an irrigation farm successfully, it is, at least, advisable to have pieces of fallow land, and to distribute the sewage on different portions on alternating days. By passing sewage through a properly prepared filtration area, we are enabled to effect the purification of a much larger volume, provided we maintain an intermittent discharge, so as to secure thorough aëration.

In all methods of application of sewage to land, it is advisable to intercept, at least, the coarser suspended organic matters contained in sewage, which should be dealt with separately. The irrigation field must in all cases be properly and thoroughly underdrained. The preparation of the surface of the land should be simple and inexpensive, and must depend somewhat on the general topography of the field, as well as upon the kind of vegetation which it is intended to raise from sewage. It is important that the sewage be distributed evenly and in as fresh condition as possible. Much the best plan to secure an intermittent discharge and to avoid an irregular and trickling flow, is to collect the sewage from the house in a self-acting flush-tank. Wherever possible the sewage should be conveyed to the latter by gravitation, and the location of the irrigation field should

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be selected accordingly. Occasionally, however, pumping becomes a necessity, and this may be accomplished either by a steam pump, a gas or hot air engine, or a windmill.

I shall, hereafter, dwell more at length upon the sub-surface irrigation system, and shall explain some of its details, because I regard it as the best available system for the disposal of liquid and semi-liquid wastes of isolated country houses. Before doing so, it may be well to sum up what I have said about the methods available for disposing of sewage of isolated country houses.

Such houses as are not in reach of sewers can dispose of their liquid sewage in some cases by a direct discharge into a stream (taking this word in its widest significance) or into the sea. As a rule, however, it is absolutely necessary, and vastly better to adopt some system of purification on the premises. Of systems of sewage purification, application to the soil is preferable to mechanical filtration, or to chemical precipitation. The latter methods should only be resorted to where no land suitable for disposal is obtainable. Of the methods of applying sewage to land broad irrigation is least favorable, as it requires a large area of land, and in cases where the field is located close to the house, it becomes objectionable. Inter-mittent downward filtration, while requiring a much smaller surface, is yet open to the second objection made to surface irrigation. Far preferable, for single houses and isolated institutions, is the sub-surface irrigation system. Leaching cesspools are absolutely inadmissible, and the same is true of tight cesspools with overflows into a ditch or water course. In a few cases it may be necessary to adopt a perfectly tight cesspool without overflow, and to pump the liquid out at frequent intervals, distributing it on the land. This alternative should be resorted to only where all other methods prove objectionable or impracticable.

Architectural Ironwork.

BY C. W. TROWBRIDGE.

STRUCTURAL CAST-IRON WORK—CONCLUDED.

(Continued from Vol. VIII, No. 10.)

One more point with regard to columns and I will be done with them. On turning off the ends it is necessary to measure from the brackets if any are cast on the ends and trim to figure length. As columns often shrink differently the thickness of the bottom flanges, which are usually some distance from the brackets, is liable to vary. It is nothing uncommon to find $\frac{1}{4}$ inch difference in the thickness of bottom flanges of columns from the same pattern after turning off in the lathe; and in cases where it was necessary to change the mixture of iron I have seen columns from different days casting vary 1 inch in 16 feet. Of course the pattern was changed after the first day to fit the new shrinkage.

After castings leave the foundry they are often crooked. You can safely say if a column is crooked that the side which is longest will be thinner, usually from shifting of the core, sometimes from carelessness in setting the core. Castings are straightened in several ways. One of the most common is to heat them, and spring them a little the other way; secure them in that position and let them cool; when released, they will be straight. This weakens them considerably, but as this is not applicable to very heavy pieces it does not often occur in pieces subject to strains in the building. Another way is to pound the short side with the pene of a hammer till it is as long as necessary to bring the piece straight. I have seen columns that were pene, but am glad to say not many of them.

In casting lintels, considerable thickness of metal is quite an advantage, by allowing heat to pass from one part of the cast to others to balance unequal radiation of heat into the mold—data regarding the strength of castings under transverse strain is not very plentiful, and the result of a few isolated tests generally quite unsatisfactory. Owing to the great variation of strength of castings from the same pattern and same day's cast quite often these differences are fifty per cent. Generally this can be traced to some cold shut blow hole or some defect in the weaker casting. As stated before, I think that adoption of rough testing machinery by foundries would result in reduction of weight of cast-iron lintels $\frac{1}{2}$ inch; it would also result in *breaking many castings* which now go into the building and do their duty all right owing to the enormous factor of safety used in their design.

The use of cast-iron for girders and lintels has been greatly retarded by there being no easy rule for calculating the strength of the many forms of sections which are wanted by architects in places exposed to transverse strain, and the impossibility of confining the use of cast-iron to a few well defined types of sections, as is the case with wrought iron work, where "I" beams, channels and box girders are used almost exclusively, and their strength is readily obtained from printed tables based on experiments by rolling mill owners. The simplest solution I can offer of the cast-iron girder problem is to give a general rule applicable to all sections, basing their strength on the moment of inertia, obtaining the moment of inertia by graphic analysis (a very simple process, quickly learned) which will be easily applicable to the most intricate and ornate forms of lintels. The universal application of the rule $W = \frac{8SI}{l^3}$ (or eight times the extreme fiber strain per square inch in pounds, multiplied by the moment of inertia, divided by the length of the span in inches, multiplied by the distance from the neutral axis to the extreme fiber in inches, will give the uniformly distributed load in pounds) will enable you to use any unusual or curious form of cast-iron lintel with as much safety as one of the old and familiar forms. Now, don't be alarmed, boys, it is an interesting looking formula, I will admit,—looks dangerous, like a bulldog on a strange piece of road. I like to "shy off" and go round some other way when I meet a dangerous looking formula, too,—but this is not a *bad one*,—if you will write all the quantities out in figures to fit your case and use cancellation you can usually reduce it to one simple division without any trouble—and it gives "lots more reliable" results than the usual formula of guessing at $\frac{1}{4}$ of the strength and multiplying by 4. Many writers on the strength of material neglect to mention that in using this formula for cast-iron you

must consider the extreme fiber strain in both top and bottom edges of your section. It will not do to say, as in wrought-iron, that this metal is equally strong against both tension and compression. Hodgkinson says that the average cast-iron requires about six and one-half times as much force to crush as to tear it asunder, and has designed a beam, which bears his name, in which the upper fringe is to the lower one as 1 to $6\frac{1}{2}$. He obtained this result by starting with a cast-iron beam having equal top and bottom flanges, then reducing the top and adding to the bottom flanges of each succeeding beam, and observing the result of these changes on the strength of the beams, "finally adopting 1 to $6\frac{1}{2}$ as giving the utmost strength," but, on account of the greater equality of shrinkage strains, I would recommend a proportion of 1 to 4 or 1 to 5, in which case the beams will always fail by tearing the bottom flange apart. For Hodgkinson's beams, proportioned 1 to 6, or any other proportion, that would insure the fracture of the lower flange first, the following is his formula, published in Trautwein's hand-book, for the center-breaking loads in tons of 2,240 pounds: 2,166, the area of the bottom flange in square inches, multiplied by the extreme depth of the beam in inches, divided by the clear span in feet.

(This will give extreme fiber strains varying with the height of the section from 24,000 pounds at bottom and 71,000 pounds at top, for beam 5 inches high, 4 feet 6 inches span, with flanges 6 to 1, to 21,300 pounds at the bottom and 54,100 pounds at the top for beams 17 inches high, 17 feet span, with flanges $6\frac{1}{2}$ to 1.)

I have examined a table, stating the size, span, center breaking loads, and extreme fiber strains for several different sections, copied and calculated from published accounts of breaking tests on cast-iron beams, and observe that the extreme fiber strains in the bottom flanges of beams which fail by "tearing" of the "bottom flange apart" vary only in such proportion as might be expected from different qualities of iron, while the extreme fiber strains in the top have a much wider range of variation, owing to the difference in the design of the beams, some of them failing by crushing of the top flange, others failing by tearing of the bottom flange apart before the top flange had received a high strain. In beams where a single rib runs up far above the surrounding section, the beam will probably fail by crushing out a piece at the top of the rib, with an extreme top fiber strain of seventy to ninety thousand pounds per square inch, while in the ordinary three-rib lintel, the failure will probably occur by tearing the bottom flange apart, with an extreme bottom fiber strain of twenty to twenty-four thousand pounds per square inch. In designing a girder to suit a given load, the formula $S = \frac{WLn}{8I}$ will be found very convenient to determine whether the top or bottom of the proposed section will be the weakest, but for merely approximate work, a good idea of the ultimate breaking strength may be obtained by marking off from the highest part of the section a portion equal to one-fifth of the area of the bottom flange, then consider the center of gravity of this portion as the top of the beam, and apply Hodgkinson's formula, using the height from this center of gravity for a total height of section. In a case where a load cannot be made to bear evenly on the lintel, but rests on one side, as in the case of sidewalk lintels, lower strains must be allowed, varying from one-third to two-thirds the load for even bearings, according to the judgment of the designer. Brick walls, however, can usually be set upon the lintels, so they will have an even bearing on each side of the center of gravity, notwithstanding many inequalities in the symmetry of the lintel sections. Where it is possible, it is good policy to have the ribs of a lintel nearly, or quite as thick as the bottom. For the outline of the top of the rib the segmental form so commonly used, approaches very nearly to the theoretical perfect shape, and can hardly be improved upon for economy of metal. There is an unjust prejudice against cast-iron on account of its supposed lack of elasticity. This idea is, in a measure, erroneous, its modulus of elasticity is about 17,500,000, against 26,000,000 or 28,000,000 for wrought-iron or steel. Numerous experiments on cast-iron bars 1 inch square, 4 feet 6 inches span, give a deflection of $1\frac{1}{2}$ to 2 inches before fracture. A large series of experiments on cast Hodgkinson's beams, 5 inches to $5\frac{1}{2}$ inches high, 4 feet 6 inches span, give a deflection of 3 to $\frac{5}{16}$ of an inch. In one case of an extra good casting broken by me, a 1 beam, 6 inches wide, $4\frac{1}{2}$ inches high, 3 feet 6 inches span, deflected $1\frac{1}{2}$ inches before fracture, recovering itself between loadings without noticeable permanent set. Sound castings of ordinary quality can usually be depended upon to give signs of overloading before total failure to a much greater extent than is usually expected. Tredgold gives it as his opinion that the elastic limit of cast-iron is one-third to one-half its breaking load. Hodgkinson says that extremely small, permanent sets are given by one-eighth or one-fourth the breaking load, while some more modern experiments indicate two-thirds or three-quarters of the breaking load as the elastic limit. Most of the modern writers on the strength of cast-iron, agree with Tredgold in setting the elastic limit at one-third to one-half, and loading lintels to one-quarter or one-third the breaking strains in simple cases, where there is no probability of shrinkage strains or bad castings.

Snap molding is for small work only, mostly ornamental, and will be mentioned when I speak of ornamental cast-iron work.

SECTION III.—STRUCTURAL WROUGHT-IRON AND STEEL.

In this branch of the business the bulk of the work is done with "I" beams and channels. We are fortunate in the fact that all American mills are so situated that it don't pay to roll beams of poor material. I think that all the beam mills in the world, except one or two in Belgium, are so situated that their output is generally of good quality. In this country steel beams are rapidly taking the place of iron in the market. It is, I think, generally believed that they are cheaper to produce, and as far as heard from, superior in ultimate strength by about twenty per cent, and equal or superior to iron in every other respect. All the American beam mills publish books, giving the strength and deflection of their beams, stating the extreme fibre strain used in the calculation, which is usually 12,000 pounds to the square inch for iron, and 15,000 pounds for steel. It is of the utmost importance, however, that we ascertain and consider the deflection when we use steel beams, as this quality is the governing

one in determining the load, except in cases of heavy loads on short spans, while with iron usually the safe load does not produce an undesirable amount of deflection. Within the last year we have had several new and very valuable sections put on the market. The New Jersey Steel and Iron Company have brought out 20 inch beams, 91 and 66½ pounds per foot, the light weight 20 being the same weight per foot as our medium 15, while the strength is very much greater. For instance, 25 foot span, 15 inches, 66½ pound iron beam is considered safe for the load of 28,260 pounds, giving deflection of 0.59 inches, while the 20 inch same weight, span and cost, carries a load of 37,940 pounds with deflection of only 0.45 inches, often enabling us to make a saving of thirty-three per cent in the cost and have increased stiffness. We also have a new 15 inch steel beam, 41 pounds per foot by Carnegie Bros., also made in iron by the Phoenix Iron Co., which should supersede all the heavier 12 inch beams, and a 12 inch 32 pound beam in steel by Carnegie and iron by the Phoenix; this being only 2 pounds per foot heavier than the light 10 inch beam and very much stronger. This should supersede all the heavier weight 10 and 10½ inch beams, making a very great saving in the cost of ironwork, and while we have the same strength we get greater stiffness by using the higher sections of beams. This is a point that cannot be kept too constantly in mind by designers. Framing or coping of floor beams to girders is a very popular method and forms a good brace in iron floors, actually making the whole floor one solid construction tying the whole building together from all sides. However, when satisfactory anchoring can be secured without framing the floor beams, a saving of a quarter of a cent per pound can be effected. This on 15 inch 50 pound beams 30 feet long is \$3.75 per beam. If girders can be arranged so joists can rest on them without interfering with other parts of the design certainly quite considerable savings can be effected thereby. The knees, or wings securing framework together are usually riveted on to the end of floor joists and bolted to the girders. As we have to depend on the rivets and bolts anyway, I never could see why using, say 6 by 4 angles instead of 4 by 4, letting the angles project beyond the ends of the joists, cutting the joists off square to clear the girder was not just as safe, more consistent and a somewhat cheaper method of framing than the present system of coping. It would also often save time, which is a most important recommendation, as when mills are full of business, coped work often has to wait a long time for its turn in the fitting shop. No amount of theory and talk will ever enable the webs of beams to rest uniformly on the bottom flanges of the girders and carry part of the load. The rivets and bolts are always proportioned on the supposition that they will carry all the load, and in nine cases out of ten they do so, too; so why not give them the credit and trust to them only? Even if someone took all the bolts out, your beam would not fall down. The projecting knees would still rest on the bottom flange of the girder and carry the load. Most of the rolling-mill books give standard sizes of knees and numbers of rivets and bolts suitable for framing each size of beam. You only have to add two inches to one leg of your angle to let them project, putting in, say, one or two extra rivets, using the standard size and number of bolts shown in the books.

Regarding methods of securing beams and girders to columns, I can suggest no improvement over the present practice of casting brackets on to columns and resting your beams thereon, bolting through projecting lugs cast on columns to come alongside the webs of the beams. In cases where lines of beams or girders are continuous across the building, a most excellent system of bracing and anchoring is to put a good heavy bolt, say 1 inch or 1¼ through cored holes in the column, bolting knees on the girders each side, and screwing up till the ends of the beams come tight to the column, forming a solid line, metal to metal, clear across your building. When brick or tile-floor arches are used between beams it is customary to put ¾ inch rod's space 6 feet to 8 feet centers through the webs of beams to form lateral bracing. Sometimes flat ties, say 1½ by ½, or 1¾ by ¾ of an inch are hooked over the flanges of beams at bottom, accomplishing the same result and avoiding cutting of the arches which occurs with ties in the web. Any of these methods are good enough, but the great need in building business is for someone to devise some plan by which masons and fireproofers can be prevented from taking out these ties and throwing them away, hiding them in the hollow spaces in the ties, or disposing of them in some manner that was not intended. Girders made by riveting "I" beams together, one on top of the other, rivets passing through the flanges, are often used in government buildings, but we seldom see them elsewhere. They cost more than riveted plate and angle girders of same strength, and, unless in places where special conditions make their use desirable, they will hardly become common. The only book I know of, giving calculated strength of this kind of girder, is one published by the Union Foundry in the early part of 1885, when I was with them.

(Concluded.)

Personal.

JOSEPH DOWNEY, the well-known mason contractor of Chicago, has just returned from a trip through the West to California. Mr. Downey speaks of the beautiful climate, and the sense of repose one experiences there, but to one of his active temperament the classic shades of the Exchange rooms and the rush and stir of Chicago business life was much more attractive, and when the direct purposes of the trip were accomplished, his wish was to return. A rumor was started while Mr. Downey was away that one object of his visit to the coast was to secure Chinese labor to work on some of the immense railway jobs he now has under contract; but anyone who knows Mr. Downey will recognize its fallacy, for while he may, as a just and practical builder, object to some of the strictures placed upon free labor by the trades unions, he has too broad a view of the rights of the American workman to stultify them by such an importation of unskilled foreigners. Mr. Downey has been one of the largest employers of masons in the West for many years, and is in the prime of life, and at the height of business activity.

Illinois State Association.

THE regular meeting of the Illinois State Association of Architects was held March 5, President Adler in the chair. The meeting was called to order at 3 o'clock P.M., and on motion of the secretary, that the reading of the minutes be dispensed with, the president said as they had been published in THE INLAND ARCHITECT it would be so ordered.

The president called for new business.

Mr. Baumann: There is a question in regard to some amendments to the new building ordinance of Chicago, which were proposed by the underwriters, and passed by the council, without due examination. There is one amendment in regard to elevators. It says: "Hoistways in which elevators shall be used shall be constructed entirely of brick, from its lowest point, extending up through the roof six feet above the same, and all openings in such shall be protected by iron, and no wood shall be used inside of such hoistways." Now I want to ask how it is in regard to passenger elevators. There is not the slightest reference made to them.

The President: I asked Mr. Drew, the proposer of the ordinance you mention, about it. He stated that he had in view only freight elevators, and that he believed the ordinance as enforced would be applied only to freight elevators.

Mr. Baumann moved that the matter be referred to a committee of three, with full power to take such action on behalf of the association as it might deem expedient, with a view to the modification of this ordinance.

The motion was carried, and the president appointed as that committee Messrs. J. W. Root, F. Baumann and L. H. Sullivan.

The President: If there is no other business to be brought before this meeting we will proceed to the regular order of business. Mr. Root will please open the symposia.

Mr. Root: The subject of the symposia today is, "What are the present tendencies of architectural design in America?"

JOHN W. ROOT.

It is notoriously difficult for any man to accurately ascertain the tendencies of his own age. What phenomena of the day are entirely ephemeral, what of longer endurance, what of permanent life, only the trying crucible of time can determine.

Henri Taine has compared this phenomena in another art to the various geological phenomena upon the surface of the earth. First comes the shifting sand, blown lightly hither and thither, and the product of purely local forces operating on local conditions. Next are found those loosely held formations, half stone, half mud, which are scarcely more widespread, and scarcely more enduring than surface sands. These in their turn give way to the sandstones, which vary from manifestations essentially local, to great deposits underlying whole continents. Last, we find those huge elemental formations, which are as wide and as fixed as the earth.

So with architectural styles. Beginning with the earliest times, architectural style has been slowly developing new forms, whose lighter characteristics have passed away with each age, but whose essential elements have crystallized into fundamental strata. Deeper and more fundamental become these elements, more essential as sure foundations for all the various overlying formations of each later age and nation.

During the rapidly shifting phenomena of our day the problem presented to us is to determine which are ephemeral, and which will become fixed in the architectural foundations of our age and country.

Probably in no age was it so difficult to determine such a question as now. All movements are now so rapid; thought is so lightning-like, so rapidly changing; transmission of ideas and news is so instantaneous that each one of us today realizes, not only the accomplishments of all other men, but is enabled, within limits, to think their very thoughts. The consequence of this is, that we are somewhat like Sancho Panza, in that many of the dishes thus rapidly presented to our lips must be taken away untasted; while much of the pabulum with which we load our stomachs remains unassimilated.

Before every one of us has passed a kaleidoscopic panorama of styles, for whose original development three thousand years were required. To what extent may we call any of these rapidly dissolving architectural impressions our own? To what extent will architects of today leave enduring impressions upon any one of the various styles in which they have rendered their buildings? Note some of the changes of the last twenty years. Nowhere today do we find academic productions in Neo-Grec so common a decade since; nowhere those pseudo Gothic designs, to whose production were consecrated the talents of Burges and Street and Scott. In high stays, and crisp, unyielding ruffs, Queen Anne has taken coach and driven off, and now only the rumble of her distant wheels, and the lingering perfume of her lavender remain; the Neo-Jacobean has lost its royal state; the Dutch have come to London, and, like William of Orange, holds silent sway in Cadogan square; here in America the present vogue is a style called "Romanesque."

In recalling this series of swift changes we can but ask, "What in heaven's name are the present tendencies of architectural design in the world? What are they in America?"

In striving to reach some answer to this question, we will find it useless to waste time over the great mass of imitations, or the host of mere imitators. In no one of these quickly born and quickly dead art movements has anything been vitally done by the heedless throng who blindly followed the masters of their school. In each case the first apostle has made converts, among whom were a few, not content with the study of his work alone, but who went back to those original sources from which their master gained inspiration. These have added to the permanent value of his work. But how few have been their number. The vast mass of converts have been satisfied to follow where he led, to repeat what he has said, to devote lives to that mere industry of pencil which covered original and strong work with the killing vine of meaningless affectation.

Thus, in the so-called Romanesque work of today, how much comes freshly studied from France, and how much from New England? Which are commoner sources of modern inspiration, Ste. Croix, in Bordeaux, or

Trinity Church, in Boston? St. Pierre, in Angoulême, or Harvard Law School? To the really creative minds of our day, and to those students whom they have inspired to imitate, but not copy them, must we look for the tendencies of our day. In considering these men and their work, we may see reflected in them something of the influences operating upon architecture in America. The creative artist must always be a man in whom are especially focalized these influences, which are different from those which move other men of his time, not in kind, but in degree alone. Thus, in one such man will be manifestations, not only through his work, but through the mere attitude of his mind, which will clearly indicate what forces are in play about him.

But apart from questions of architectural styles, as commonly understood, and quite distinct from the study of examples in these styles, or of the men who revived them, are considerations of national characteristics in non-architectural directions. These will, perhaps, after all, give us the best answer to what American architecture must soon be, and therefore what its present tendencies are. Judged by the character of the American people, in as far as this character has been developed, some qualities which we may assume of American architecture will be:

First. It will be *Catholic*. The American people do not tend toward narrow views of things, nor have they yet developed sufficient conservatism to retain things merely because they exist. They rather tend to the adoption of any new thing, provided it merely seem better than the old, which often leads to a too sudden abandonment of older modes, cutting off slow and yet promising developments, and inflicting the newer fashion with certain harshness and crudity. What conservatism the nation may acquire when it is older is wide of the question. It is the present condition which is creating the architectural tendencies we are striving to discover; and these conditions being what they are, it does not seem that there is immediate prospect of a single national style, or of adherence to single lines of development. On the contrary, it seems more likely that each architectural style will, in its turn, be taken and Americanized,—that is acclimatized and modified by local conditions.

Second. It will be *Grave*. No student of the American people can doubt their essential gravity. Even their humor is often a mere cover for an underlying seriousness, and the sober view of things is frequently disguised beneath what, to the careless observer, seems a trifling jest. Though Americans are really grave, the gravity is not of a somber sort, nor of the quality which marks our English brother. The gravity, essentially American, has a humorous complement, strongly marked, which will give to the architecture of the future a certain *Lightness*. This lightness may, in certain buildings, express itself in grace of detail, or in delicacy of parts, or in occasional touches of fancy or even *whimsicalness*. But underlying this lightness will still remain the essential and national gravity.

Third. Our architecture will probably remain *Practical*. This means not only that structures of purely decorative character will be few in number, but that each important detail of a building must have some immediate, easily recognized and practical use. This is made likely by the strength in American character of the "commercial instinct, which involuntarily shrinks from what it considers a 'waste of money.'" Not that Americans are mean, for they are on the contrary, generous; but it is to be feared that long time must pass before we will as a nation, consider with equanimity large expenditures for buildings whose sole function is æsthetic, and whose sole beauty is to make the public mind more sensitive to beauty. At the same time there will come in America, and that very soon, an architecture of the greatest splendor.

The tremendous and rapidly acquired wealth, not only of individuals, but of the nation as a whole, coupled as it is by no national indifference to display, and by no national parsimony, will inevitably lead to the erection of buildings, both of private, commercial and public character, whose splendor will be phenomenal in the history of the world. We see many indications of this even now, not only in the magnificent palaces erected as dwellings for millionaires, but in the gorgeous trade-palaces which have already become typically American.

Thus, we may assume that architecture tends today in several widely different directions: toward *Catholicity*, toward *Gravity*, with its modifying *Grace*, toward *Utility*, and toward *Splendor*. Other tendencies there are, arising from the tastes and needs of that chief element in all republics, the vast middle class; but this class is with us so unstable, so quickly passing from a middle state to great wealth or great poverty, so influenced by boundless ambition which seems to be cognizant of all possibilities; so imitative in cheap ways of the splendor of great wealth, that these tendencies seem difficult to estimate.

DANKMAR ADLER.

I agree with Mr. Root in all his premises and in his conclusions, excepting two particulars, which I will state:

I think Mr. Root in error in fearing "that much time must pass before Americans will consider as *practical* those things whose sole function is æsthetic, and whose sole result is to make the public mind more sensitive to beauty." I believe that we see all around us throughout the country tentative efforts in every direction toward realizing in the designs of buildings the longing for a proper expression of a feeling for the æsthetic and beautiful. These longings may in many cases be vague, and the ideas crude. The means employed for their realization may also be characterized by vagueness and by uncertainty of touch, and want of resource and artistic skill on the part of the designers; but there are unmistakable evidences that this vagueness is gradually giving way to a more thorough understanding of our æsthetic longings, that our sense of the beautiful is becoming more and more developed, and that the technique of our designers is keeping pace with this higher development of the æsthetic wants of their clients, the American people.

We see expressions of this feeling for the beautiful, and indications of its gradual and healthful development, as we perceive that our designers find themselves encouraged to give artistic treatment to structures erected merely for gain, as well as to the few which owe their origin to the desire for ostentation or luxury of wealthy and cultured citizens.

All around we are made to hear and feel that there exists even among the more sordid of our speculative builders a desire to make concessions to the development of the æsthetic sense of the beautiful among those from whom they derive their gain and income.

It has become necessary to "consider as *'practical'* those things whose sole function is æsthetic, and whose sole result is to make the public mind more sensitive to beauty," and the standard of beauty is one that is constantly rising to a higher level and to greater dignity.

I also differ from Mr. Root in my estimate of the influences of what he calls the "vast middle class," for I believe that "that chief element in all republics, the vast middle class" constitutes the American people, and forms all its tendencies, artistic or otherwise. We have as yet no upper class. Mr. Root's own statement indicates that. Our men of wealth, with but few exceptions, "have quickly passed from a middle state to great wealth." They have not yet been wealthy long enough to throw off the feelings and conditions in which they have passed their previous existence, and with wealth there has not come to them that elegant leisure which might distinguish them from the middle class. Our men of wealth as a class, cannot cultivate the æsthetic sides of their natures; on the contrary they have become wealthy, and they retain their wealth because of their restless activity, their boundless ambition, because of a concentration of their thoughts, aims and ends upon the advancement of their business interests. Their contributions to the artistic development of the American architecture are in the direction of that splendor which Mr. Root has mentioned as the objective point of one of the tendencies of American architecture. And as far as this tendency finds expression in the use of choice and superior materials—in the development of a high grade of artistic workmanship, and in the exercise of greater care and circumspection in the selection of architects to whom these expenditures are intrusted—to that extent the influence of those who have passed from the middle state to great wealth will be in the direction of an advancement of our architecture. And to that extent it will influence for good that imitativeness "in cheap ways, of the splendor of great wealth" on the part of the great middle class—that is of the American people at large—which to me, as to Mr. Root, and probably to all of us, seems so dangerous a tendency in the development of our national style of architecture.

But the general effects of this imitativeness seem to me to possess a rather wholesome tendency. The truly good features of the higher class of buildings cannot be effaced in reproduction, while the meretriciousness and "whimsicalness" that may be found in buildings upon which large sums of money have been expended, and which in such buildings may derive from their association with better work, and execution in the best material, and with the best workmanship, a certain dignity of effect which, when imitated in cheaper buildings, in cheaper materials, in inferior workmanship, become grotesque, and carry with them their own condemnation—a condemnation which will then reflect upon their prototype in better buildings. The danger, therefore, of finding salient features of good buildings travestied and caricatured in inferior structures, will make the projectors and designers of the better buildings all the more careful to exclude from them all features that are not subject to this danger.

I therefore believe that to the tendencies of modern American architecture enumerated by Mr. Root, there should be added another, namely, that of the gradual elimination of all whimsical and trivial features.

CLARENCE L. STILES.

The subject matter presented by Mr. Root for our consideration, in regard to "What are the present tendencies of architectural design in America," admits of so little question that it seems presumptuous in one of the youngest members of the profession to disagree with any of his premises or his conclusions, and especially inasmuch as Mr. Adler has said, "them's my sentiments." But, notwithstanding the fact that Mr. Root has taken the ground that each style of architecture will in its turn be taken and Americanized, inferring thereby that we would eventually have a national style of architecture, consisting of modified preëxisting styles, I must take a little different view of the matter.

Taking into consideration the acknowledged lack of conservatism and the independence of American thought, may not the formation of a distinctively American architecture be among the possibilities of the near future? By this is meant an order or style which shall be the outgrowth of American thought and feeling, and the result of conditions under which that thought and feeling has been developed. Not an American edition of any existing style, not even a combination of them, but a style of architecture which shall be as distinctive as any of the already recognized styles of other countries.

Why should not this be the case? We have creative minds among us. In all other branches of human knowledge invention strides with seven league boots into unexplored and hitherto unimagined possibilities. Are we alone of all the professions to remain slaves to the past, and live on, following the old masters, grand and noble though they be, only combining and rearranging, but never originating.

Would Mr. Root deny to us the mental vigor of other nations, who have impressed upon their architecture their own individuality and characteristics? It must be acknowledged that there are features of our style which are essentially American, and I am therefore inclined to assume that one of the tendencies of design is toward an American style.

I agree with Mr. Adler that there are "unmistakable evidences of a longing for the æsthetic," and to such an extent has this idea taken hold of the American people that the man who builds for profit does not now stop to consider whether it would be practicable to expend his money upon "those things whose sole function is æsthetic," but rather question if it would be practical to build without them. It is rarely that our clients desire plain, substantial structures, regardless of ornamentation; but on the contrary the cry is, make the front as attractive as possible, catch the public eye, throw out a bay here, pull in a bay there, and let the sunflower, the honeysuckle and the daisy be worked in bas relief on all sides. Or as Mark Twain might put it: He wants an excrescence in the shape of a toadstool on one corner, a swelled eye on the other, and a reminiscence of

a big spree on poor (county) whisky in the middle. These main features to be toned down and brought into harmony by means of a few Chinese parasols pasted to the face of the wall upside down, highly ornamented with bits of stained glass, broken cobble stone and cement rubbed and polished.

From these observations I take it that it is not only "practical," but decidedly profitable to indulge in "those things whose sole function is æsthetic."

We all hope, of course, that the time is not far distant when these trivialities will be thrown aside, and only the truly beautiful be demanded or tolerated.

The thoughtful and conservative members of our profession, who never allow themselves to run after strange gods, are still those whose councils are the most valuable to us, and their influence upon both the profession and the people will undoubtedly have a tendency, as Mr. Adler has already said, to eliminate from our designs "all whimsical and trivial features."

W. W. BOYINGTON.

I agree with Mr. Root in his thesis of the moving, shifting elements that seem to be almost a floating ephemeral substance, seeking a lodgment on some fertile field, to take a permanent root and be cultivated into the æsthetic and beautiful architectural forms which are so rapidly forming the "substrata" of a national style. But as yet we must admit the crudeness of the tendencies of our mixed heterogeneous combinations. We are undergoing a transient state which develops disproportions, poor applications, and a general lack of any fixed standard or guide. The present state of things must, of necessity, be so. Having broken away from the fundamental rules which governed the ancient architects, we have no further use for the rigid scale of minutes which governed the ancients in producing all their proportions of heights and breadths and depths, and the minute details of the orders of architecture. We have no place for the sturdy Grecian, Doric or Tuscan, or the feminine and graceful Ionic, or the masculine but beautiful composite, or for the Queen of the Orders, with its gorgeous crowned capitol, the Corinthian. All these have been consigned to a place in history, as a rule. While we are deviating from the old masters, we have very much to learn before we can ever establish a national style of architecture, except it becomes national from its crudeness. The tendency to diversity in style retards crystallization, and also the fact that our thoughts have to keep pace with the very electric rapidity of the times. Hence there is but little time to crystallize architectural impression. We are carried on the wings of time by the locomotion of the nineteenth century, and our designs have to be executed red hot from our trundle-boards. As Mr. Root says, "The creative artist must always be a man in whom are especially focalized these influences," namely, electricity in thought set forth like the power of a locomotive. I repeat from Mr. Root, "In recalling this series of swift changes we can but ask 'What in heaven's name are the present tendencies of architectural design in the world? What are they in America?'" I must say for one the signs of the times are not flattering for a national style of architecture.

Our would-be aristocracy are aping after nobility. While they may have wealth, they have not the æsthetic taste to secure good results, to dictate the artist or discern the beauties of architecture. So long as the standard of American architecture is taken for granted—that whatever emanates from the hands of reputed celebrated architects must be æsthetic, even though these architects produce designs for palatial dwellings with diminutive loop-hole windows that the stranger observer would take to be a copy of some ancient cloister or a modern cell-house, without a line of beauty or an architectural detail—I say so long as such designs are accepted as true art and of æsthetic taste, just so long will we be stamped as scrubs in architecture and devoid of good taste. Mr. Adler remarks, "our men of wealth as a class cannot cultivate the æsthetic sides of their nature." Then I should say they had better not set themselves up as connoisseurs in the architecture, or ape after such dazzling lights as are likely to reflect a vitiated or morbid taste.

Consequently I must say that while there are many tendencies to elevate the standard of architecture at the present time, and the undoubted advance in æsthetic taste, yet there is about an equal amount of crude and unskilled production which seems to be as well accepted by some of our wealthy citizens, as does the beautiful and really architectural. This in a great measure grows out of the fact that wealth comes so quickly to the lower or middle class of society that, as Mr. Adler says, "they have no time to study the æsthetic side of their nature." I consider we are arriving nearer to something tangible as a national style in the interior finish of our buildings than we are from the exterior; but as the exterior becomes public, the general impress upon the public taste is made manifest therefrom. Consequently, it is supposed as a rule that from the exterior the public can form some idea that the same general impression as is produced from the exterior should prevail in the interior. But my observation is to the contrary. Many of our crude appearing buildings, externally, have really a magnificent interior finish, worthy to be considered as having been studied from an æsthetic standpoint. So that while we may excel in our interiors, and in many of our exteriors, there is a marked inclination to ugliness in design in some of the modern exteriors. And having so many mere copyists in our profession, the crude is as likely to be repeated as is the really meritorious. Hence I conclude that we are far from consummation of a national style of architecture.

Since preparing the above I have received Mr. Stiles' contribution to the Symposium, in which he inclines to the belief that "we have creative mind among us," sufficient to soon formulate "a style of architecture." He says, "Why should not this be the case?" I would say for the very reason which Mr. Stiles reiterates, that the demand of our clients is, "make the front as attractive as possible, by throwing out a bay here, pull in a bay there, work in a sunflower, a honeysuckle, a daisy, a toadstool, a swelled eye, a Chinese parasol," and a general series of such excrescences, which is, to my mind, a good reason why we are too much inclined to flippery to arrive to the dignity of a national style of architecture.

J. W. ROOT.

In summing up the subject under consideration I will allude to the preceding papers in the order in which they appear.

Mr. Adler makes the point that the first writer was wrong in the belief that an ideally "practical" architecture in America was remote. It is not unlikely that he may be right, and that at some future time America, like Italy, may be full of the monuments, the triumphal arches, the memorials in mosaic and fresco, which are the glory of the Renaissance. But at the present time there seem few indications of this. In the typical American mind there seems at present a certain insistence that each important structure shall have an easily recognized value, when viewed from the plane of pure utility. This feeling constitutes no bar to the adornment of such buildings as are erected; on the contrary, it may in some cases demand this adornment. But its tendency is to make more probable the building of public libraries and court houses, stores, dwellings and office buildings, than costly monuments or elaborate memorial structures devoted to purely artistic purposes. One may note with curiosity how oddly blended the æsthetic and practical are in some of our more notable structures. Great corporations often erect vast buildings for their own uses, which to the casual and uninitiated observer seem great monuments to beauty, rather than to trade; the practical American mind, however, notes the value of the advertisement.

This practical quality of mind will, I contend, for a long time prevent America from becoming distinguished by many classes of structure, and of general art productions, as well, whose sole purpose is æsthetic.

The same practical turn of mind will in all likelihood tend to that elimination of adventitious features to which Mr. Adler has referred, and this tendency is only one manifestation of the same quality of mind which I think insists that all buildings shall have some "immediate, easily recognized and essentially practical use." You will note here, then, that Mr. Adler and I are practically as one.

Let me now refer to the "vast middle class."

Among all nations America is peculiar in having no recognized class distinctions. The consequence is, that as a matter of theory, the position of the highest is within reach of the lowest. I say, as a matter of theory. As a matter of fact it is not now, and never was, and never will be true. Still this is the theory of our national system, and as a state doctrine is eminently wise and true. What is the result?

In France, in Germany, in England, the lower classes are complete in themselves, and in the vast majority of each person, the highest ambition is to rise to the top of his particular class. One does not, therefore, see farmers' wives and daughters imitating the town fashions set by lords and ladies, nor "persons in trade" following the latest "fad" of Marlborough House. Here, on the contrary, nothing is too good for any one of us, provided we can get it! and since it is always theoretically possible to get it, we get the next best thing, as a step in the right direction.

The fashion of last year in town is in the country the fashion of this year.

The "newest thing in bonnets" graces the head we see at the palace car window, and the "dowdy" bonnet of last year sits uneasily upon the head of her less fortunate sister in the common coach.

The same democratic spirit is on the increase in other countries, but nowhere has it reached the development it has here.

Even upon the faces of large classes of Americans are indelibly stamped traces of what in so many is this ineffectual rivalry. In architecture, the same thing is true—and with strange results.

To an architect comes a client. Client *loquiter*: "I saw a house on the corner of Seventy-third street and Madison avenue which pleases me very much, and I want something like it. Of course, I don't want to spend so much money, for I really suppose that house must have cost enough to 'bust a bank.' You see, I want to build a comfortable, attractive house—with new ideas, and different from other houses—one that I could sell to advantage if I wanted to. You see, I don't expect to live in this house always. When I get along a little further I may want to build another, and I don't want to put so much into this that I can't get it out. Then the city is growing and changing so much that the location may get undesirable. Business may get alongside of me."

Is this typical or not?

Here is what I mean by the architectural influence of the "great middle class."

Architects being more or less human, and the original prototype being a house which cost several times what the copy may cost, you can readily see the result.

And the client is the more readily reconciled to the cheap collections of makeshifts which go to make his house, because he hopes to sell, and build more substantially before the shams reveal themselves, or else his house may be made valueless as a dwelling by the encroachments of business.

All this means much for the rapid growth and substantial prosperity of the country, but it does not mean so much for the substantial character of the building.

Now, as to the whimsical features alluded to, I do not conceive that this practical spirit, tending as it does to their suppression, will totally eliminate them, although it will certainly make them less frequent.

Not only have Americans a strong sense of poetry overlying this practical quality, but they have, as was noted before, a strong sense of humor. This poetry and humor will, I believe, continue to express themselves in occasional touches of the whimsical even upon our dwellings. These touches will be refined by better taste and higher culture, and will consequently lose much of their offensiveness, but, like slang, they serve a purpose.

Slang may be vile when indiscriminately used, or when used by an ignorant man; but slang may be most valuable and picturesque when used with good taste and discrimination.

Mr. Stiles is sanguine of an American style—a style "distinctly American." In a measure I share this hope with him. But I do not think this style will be freed from the traditions of those which have preceded it.

It will probably grow as grew the varied types of the Renaissance in

Italy and France, rather than as the early Gothic, which suddenly shot up into an entirely new flower.

Styles of architecture grow out of deeper conditions than mere matters of exterior ornament, or even of interior arrangement; and our American styles will probably, for a long time, go no further than the modifications, to a greater or less degree, of what we have.

In a narrow sense we thus acquire American styles, just as we have a French Renaissance of Francis I, of Louis XIV, of Louis XVI, of the second empire, all based upon earlier classical types and closely related to them.

There seems to me no observable tendencies in the American mind to a form of national character, which will be content with one type of architecture in the same sense that the Germans of the thirteenth century used Gothic alone. This singleness of purpose, as Ruskin points out, is necessary, apart from other conditions, for the evolution of an architectural style; and he goes so far as to claim that such singleness of aim is necessary for any thoroughly good architecture. He states that at no period of the world's history have men created a noble type of architecture when at the same time they used any other.

Be this as it may, I think both history and present observation will show us that Americans will continue to exercise the greatest latitude of choice in the selection of architectural types, but each will become so thoroughly impressed by national conditions, and so molded by the national mind, that beneath and beyond all styles of superficial expression will be seen the type American.

Mr. Boyington laments the chaotic condition which surrounds us, and the state of crudity in which we find ourselves. This, although lamentable, is, I think, unavoidable. All new communities are crude, and in our own case there are many reasons for an especial crudeness. Not only are all our conditions new, and therefore tentative, but we live amid conditions so rapidly expanding that no single thing remains fixed after we have tried to fix it. New ideas are pouring in upon us in torrents, and we can no more shelter ourselves beneath the umbrella of old traditions than we could beneath a green cotton umbrella when under Niagara. Nothing is left but to get drenched, or "get in out of the wet." Crudeness is also a general and necessary accompaniment of the tremendous vitality of youth, which scorns the restraints of conventionality. The next thing after perfect refinement is death. It is also to be expected that some of our millionaires should be just a little conceited and self-confident. Millionaires are this everywhere, even when standing amidst old civilizations, and before art traditions hoary with the frost of centuries. With us influences all about them tend to create an especial self-confidence. Their success in what is too often considered the thing to be supremely desired, emboldens them to essay with equal confidence the conquest of other fields. For them the sacred name of art has no terrors. Art is a commodity—purchasable.

To most men whose lives are given to the acquisition of money, it is only late in life that there comes a dawning sense that there are priceless things beyond the get of all bonds and stocks and gold. Thus their children, obtaining money easily by a simple deed of transfer, hold lightly what their fathers held tightly, and art is the gainer.

We are yet in our national first generation, certainly so far as art is concerned. Yesterday—it seems but yesterday—there was no architecture. Today we have—what we have!

Today, as Mr. Boyington truly says, "Wealth comes so quickly to the lower or middle class of society that they have no leisure to cultivate the æsthetic side of their natures." This need cause us no alarm. When government $3\frac{1}{2}$ per cent securities sell for more than par, the time is not remote when money will not be so rapidly acquired, and when people will have larger opportunity to polish up their æsthetic side.

Meanwhile let us, who are contributing something either to hasten or retard the progress of architectural development in America, remember a few things:

As mere copyists we can never do anything for good. To copy what any man has done is moral and artistic degradation. To emulate the spirit in which a great work has been done is moral and artistic elevation. Some other man's good idea may be legitimately "appropriated" by us; but it is certainly adding insult to injury, if, after appropriating, we proceed to vulgarize it. Let us also remember that we can do nothing vital without hard work. In a broad and generous spirit we may each offer to all what he himself has done, simply saying "Here take this as common property; analyze and criticise it,—then finding what there is of good in it (if you must make use of it) use only the good. Don't use my property for the ill of mankind, nor repeat in enduring stone and brick the crimes and follies of my life. Rather help me by your vigor of thought and art-life to cast these follies into deepest oblivion, and let us all unite to lift each new and good thing to the highest peak of immortality." So shall our architecture become, whatever else it be, true and enduring.

DISCUSSION.

The President: Gentlemen, the purpose of the symposium is not merely to give the association the ideas as put forth in these more careful and elaborate efforts, but also to invite a free and general discussion of the subjects presented; and I think we should all be pleased to hear from individuals here present their views upon what has been presented by those officially engaged in this work, and also such additional independent contributions as they may wish to offer.

Mr. Baumann said that he thought *utility* one of the most salient points, and that it had not been as fully emphasized as it ought to be; that in this modern age *utility* was the true base of architectural art. We have spoken of *style*. What do we call style? What is style in architecture? He concluded by quoting from Professor Gottfried Semper, the great German architect, in his work published on the subject: "*Stile ist die Uebereinstimmung eines Bauwerkes mit den Bedingungen seines Entstehens*"—Style is the coincidence of a structure with the conditions of its origin.

Mr. Sullivan: I think we are starting at the wrong end entirely.

We are taking the results of what has already passed, examining on the surface, and from that are searching for the source of impulse. I do not believe the origin of style is outside, but within ourselves, and the man who has not the impulse within him will not have the style. But the more he thinks, the more he reflects, observes and assimilates, the more style he will have. So, therefore, it seems to me that the eventual outcome of our American architecture will be the emanation of what is going on inside of us at present, the character and quality of our thoughts and our observations, and above all, our reflections. If I were to forecast the outcome of American architecture I should search for it by the study of my own generation; not by studying the architecture of the past. We are in a vast ferment at present, and like most of them, the top of the liquor is covered with scum, but the real process is down below; and it is from this gradual clarifying of the fermentation of thought that the style will result, but the impulse must come first. Therefore, I think that to arrive at the style it is a great deal more important that we should be good observers and good reflectors rather than good draughtsmen.

Mr. Patton: Suppose we take at random a large number of architectural designs by average, good and bad architects, of all nationalities, could not any one of us in nine cases out of ten pick out every American design? Can we not tell almost at a glance that it is not French, German or Italian, but American? Is there not a particularly American style today? Then too, each has its own particular style. We see the individuality of the designer, and we see the national characteristics. It seems to me that we are converging more and more readily every year toward a certain amount of uniformity of treatment of whatever style we do adopt. I am sure that foreign architects years ago had more influence with us than they have now. I have been much impressed with how we are studying the work of American architects rather than the English architects today.

Mr. Root: I think we are in danger of getting a little wide of the subject, by the loose way in which we are using the word "style." I think it is our desire, and the intent of the papers here read, to limit the use of the word to its technical sense. If we use the word in its wider sense, then I entirely agree with the gentlemen who have spoken. The intention of modern architecture is not to inspire one to a direct imitation of his work, but rather to inspire one to go after those original sources from which he took *his* inspiration, and work over the same methods that he himself used, and produce parallel results.

Mr. Sullivan: With reference to Mr. Root's point, from such use there will gradually result a clinging to certain forms. It must come to everyone who has closely thought of the subject, that the use of any historic motive, which once had a special significance, now seems rather thin and hollow when used in our designs.

Mr. Pierce said he thought that in the discussion of the present tendency of style in architecture—the American style, that the wide latitude which our architecture must cover was overlooked; that the study of historic styles shows us that the architecture of every country largely depends upon the necessities arising out of local conditions, of climate, etc., and consequently one style of architecture could hardly cover our extensive country. We are made up, he said, of a multitude of people, coming from every part of the globe, who bring their own traditions, and it was unreasonable to expect all these varied ideas to fuse themselves into one local style.

After some further remarks, the president said: Before closing this discussion, I wish to enter a little protest against a matter which Mr. Root, the leader of the discussion, has, perhaps, emphasized more than he intended to, and that is, the insistence upon the existence here of a middle class as a separate and distinct feature.

We are all the middle class in our own estimation; we all realize that any one of us who may now be apparently below, may in a short time rise to an immeasurably high position. We are all familiar with the story of the rail-splitter, the tanner, or the canal-boy. Though we are all young men, there is not one of us but what has seen a bookkeeper, a clerk, or a laborer perhaps, become a merchant prince or a millionaire; so that we are sure to see before us that there are no class barriers, and that the only class distinctions there may be, are the incidental ones produced by wealth, unless, perhaps, the efforts which are now being made by trades unions, etc., may produce, after a while, a separate and distinct class of people, who are self-styled "the laboring class," and who never hope to rise to a higher condition. But the leaders who are seeking to bring about this state of affairs are decidedly un-American, and I believe their ideas are ephemeral, and that we will always be a people without class distinction; and therefore our architecture will never be the expression of the conditions or the wants and desires of any small class, but of the American people as a whole. Our architecture will develop into an easily recognizable style, and perhaps has already done so, simply because it is compelled from the inherent conditions of our American life, to express the wants and the needs of the American people, with the means that are at the disposal of the architect of today. But as these means are constantly growing, as the conditions under which work is being done, and the means placed at our disposal for doing this work are constantly shifting and changing, I doubt whether we shall, for many years, see an absolute crystallization of these into what we would like to call an American style; and it will be for the art critics of future generations to more definitely determine the tendencies of that style, and to define its peculiarities. These critics will be out of the struggle, and will be able to see the actual results, and will not know the immediate history of each individual effort.

Mr. Root explained that he had been misunderstood, and that in this country, where the laborer sometimes rose to the multi-millionaire, the change from one class to another was so rapid that to designate that to which an individual belonged would depend where one caught and branded him. The meeting adjourned.

The symposium for the April meeting is: What is the just subordination in architectural design, of details to mass?

It will be led by Louis H. Sullivan, W. L. B. Jenney, L. D. Cleave-land, O. J. Pierce, L. H. Sullivan.



Association Tennessee Architects.

PURSUANT to the call issued by William C. Smith, F. A. I. A., and George W. Thompson, F. W. A. A., of Nashville, the architects of Tennessee met at Nashville on February 24, and formed a state association.

The meeting was called to order by G. W. Thompson, who nominated W. C. Smith as chairman of the convention, who was elected. On taking the chair, Mr. Smith stated that a call had been issued inviting the architects of the state to hold a convention, believing that a meeting for conference and the discussion of matters relative to the practice of architecture would greatly benefit the architects of the state.

The chair stated that R. C. McLean, of the INLAND ARCHITECT was present and in behalf of the architects assembled would present to him a most hearty welcome.

Mr. Smith made opening remarks, in which he sought to outline the work of the convention. One question that should be considered was that of state law regarding the licensing of architects. Another, the present method of awarding contracts. The present practice of awarding contracts separately, was abominable and should be changed. The speaker had already notified the Nashville Builders' Exchange of the desirability of a change; but whether that body had acted in the matter or not, the architects should, and suggestions outlining the proper method should be made. We will also organize a state association, so that we can have a schedule of charges of what we consider right and proper fees for our services as architects. These and other things will come before us which it will be proper to duly consider.

The chair stated that it would be necessary to elect a secretary for the convention, and on motion, R. C. McLean was asked to fill that office. The chair declared the convention open for business.

A resolution was passed to proceed to form a state association and a committee of three on permanent organization was appointed by the chair, consisting of Messrs. G. W. Thompson, J. P. Wilson and John S. Smith.

A committee of three to report on constitution and by-laws was appointed by the chair, consisting of Robert Sharp, T. L. Dismukes and R. C. McLean. On motion, W. C. Smith was added to this committee.

Letters were read by the chair from Architects R. G. Rosenplaenter, C. C. Burke and J. B. Cook, of Memphis, and J. F. Bowman, of Knoxville, stating in substance that they would be unable to be in attendance upon the convention, but were in full sympathy with the purposes of the meeting.

On motion by Mr. Dismukes, the gentlemen named were added to the roll of membership as charter members.

After a recess of thirty minutes, Mr. Sharp, Chairman of Committee on Constitution and By-Laws, read the report, and after discussion, section by section, the following was adopted as a whole:

CONSTITUTION.

NAME.—Section I.—The name of this association shall be The Association of Tennessee Architects.

OBJECTS.—Section II.—The objects of the association are: To unite in fellowship the architects of the State of Tennessee, to combine their efforts so as to promote the artistic, scientific and practical efficiency of the profession, and to cultivate and encourage the study of kindred arts.

MEMBERS.—Section III.—This association shall consist of active, associate and junior members.

QUALIFICATIONS.—Section IV.—Any architect engaged in the legitimate practice of his profession in the State of Tennessee may become a member of this association.

[Section 8 of the constitution of the Western Association of Architects is given in definition of Section 4 of these by-laws.]—The status of an architect is hereby defined as follows, to-wit: An architect is a professional man whose sole ostensible occupation consists in supplying all data preliminary to the material, construction and completion of buildings, in exercising administrative control over the operations of contractors supplying material and labor incidental to the construction and completion of buildings, and in officiating as custodian and arbitrator of contracts, stipulating terms of obligations and fulfillment between proprietor and contractor.

Section V.—Civil engineers, artists, and such persons of culture and taste as may feel an interest in architecture and works of art, may become associate members, and attachés of architect's offices may be admitted as junior members, with all the privileges of the association, except that of voting.

OFFICERS.—Section VI.—The officers of this association shall be a president, a secretary, a treasurer, three vice-presidents, and an executive committee.

DUTIES OF OFFICERS.—Section VII.—It shall be the duty of the president to preside at all meetings of the association; or, in his absence, this duty shall devolve on the vice-president present from the city where the meeting is held, or that nearest the same.

It shall be the duty of the secretary to take minutes of all meetings of the association, and to conduct all its correspondence, subject to the control of the Executive Committee.

It shall be the duty of the treasurer to collect all funds of the association, and disburse the same on the order of the secretary, when countersigned by the chairman of the Executive Committee.

The Executive Committee shall consist of the secretary, treasurer, and three active members, including the president, who shall be chairman *ex-officio*. It shall require three members of this committee to constitute a quorum.

It shall be their duty to exercise control over the property and general interests of the association; to receive nominations for membership and act upon the same; to consider complaints, and expel members of the association for cause; to act as a committee of arbitration on all questions submitted to it by members of the association, and generally to have control of its welfare and interests.

All calls for extra meetings shall be issued by this committee.

This committee shall report to the association at each regular meeting of the association.

All appeals from the action of the Executive Committee shall be to the Board of Directors of the Western Association of Architects.

AMENDMENTS.—Section VIII.—This constitution may be amended by a two-thirds vote of the active members present at any meeting of the association, provided that a notice of such proposed change shall have been mailed to each active member by the secretary, on the order of the Executive Committee, twenty days before the date of said meeting.

BY-LAWS.

MEETINGS.—Article I.—The regular meetings of this association shall be bi-monthly, and shall occur on the third Thursday in February, April, June, August, October and December, unless otherwise ordered by the Executive Committee, ten days' notice having been given. The place to be chosen at each preceding meeting.

The annual meeting shall occur on the third Thursday in February.

RULES OF ORDER.—Article II.—The meetings of this association shall be conducted according to Roberts' Rules of order.

APPLICATIONS FOR MEMBERSHIP.—Article III.—Any person desiring to become a member of the association shall send his application in writing to the Executive Committee, this application to be indorsed by two active members of the association who are personally acquainted with the applicant.

ELECTION OF MEMBERS.—Article IV.—Upon receiving an application for membership, the Executive Committee shall investigate the standing of the applicant, and shall, by ballot, admit or refuse him. All discussion of applicants to be considered confidential.

DUES.—Article V.—All active members of the association shall pay an initiation fee of \$5 and annual dues of \$3. Dues to be payable semi-annually, in February and

October, and no person shall be entitled to vote at any meeting, whose dues may be in arrears for twelve months.

QUORUM.—Article VI.—Five active members shall constitute a quorum for the transaction of business.

ELECTION OF OFFICERS.—Article VII.—All officers of the association shall be elected at the first regular meeting of each year of the association. They shall be elected by a majority ballot vote of the members present. If any member of the Executive Committee is absent from four of its consecutive meetings, the other members shall have power to declare his place vacant, and proceed to elect his successor for the remainder of his term. A two-thirds vote will elect.

PAPERS AND RECORDS.—Article VIII.—All papers and other records, not considered by the Executive Committee confidential, shall be at all times open to the inspection of the active members of the association.

AMENDMENTS OF BY-LAWS.—Article IX.—The by-laws of this association may be amended by a two-thirds vote of the active members present at any meeting, notice having been given as in the case of proposed amendments to constitution.

The report of the Committee upon Permanent Organization was called for, and G. W. Thompson submitted the following as its choice of officers for the ensuing year:

President, Wm. C. Smith, of Nashville; secretary, T. L. Dismukes, of Nashville; treasurer, George W. Thompson, of Nashville.

Vice-presidents, P. J. Williamson, of Nashville; J. B. Cook, of Memphis, and J. F. Bowman, of Knoxville.

Board of trustees, P. J. Williamson and R. G. Rosenplaenter together with the secretary, treasurer, and the president, who is *ex-officio* chairman.

The report was accepted, and on motion by Mr. Dismukes the rules were suspended, and the secretary instructed to cast the ballot for William C. Smith, as president.

On motion of Mr. Laurent, the secretary was instructed to cast the ballot for the remainder of the report.

On motion of G. W. Thompson, the entire minutes of the proceedings were ordered printed in THE INLAND ARCHITECT, and a marked copy sent to every architect in the state of Tennessee.

Mr. W. C. Smith said: Some if not all of you are familiar with the part I have taken in this state in past years, in regard to fighting the taxing of architects, and that two years ago I succeeded in getting the tax imposed by the legislature removed. Some years ago the architects of Nashville took the matter up and presented a memorial to the legislature. It passed two readings and then stopped. In the next session, the matter was taken up by the Committee on Revenue, and the tax upon architects and engineers was repealed. It was again put on at the last meeting, and though not as heavy as before, it is unjust, as any professional labor, such as that of the architect, should be taxed no more than the artist or lawyer. Proper steps should be taken by the association to have the tax permanently removed.

Mr. McLean presented the Western Association bill for the examination and licensing of architects, briefly explaining its purposes, and read the bill.

After some discussion, on motion of Mr. Laurent, a committee of three, including the president, was appointed by the chair, to make such changes in the draft of the bill as would adapt it to the state of Tennessee, and present it to the legislature. The committee also to be charged to take such steps as is deemed necessary to secure the relief of architects from the present tax. The committee appointed are, William C. Smith, Edward Laurent and George W. Thompson.

On motion, a committee of three, consisting of H. C. Thompson, P. J. Williamson, and Robert Sharp, were appointed, to select a place for the next annual meeting.

G. W. Thompson made the following motion:

Resolved, That a committee of five be appointed to examine laws and customs pertaining to measurement of masonry, and report at our next annual meeting, with recommendations looking to a uniform practice.

The chair appointed W. G. Thompson, J. L. Smith, P. J. Williamson, J. B. Cook and J. F. Baumann.

Robert Sharp offered the following resolution:

Resolved, That the schedule of charges as formulated and adopted by the American Institute of Architects, and the Western Association of Architects, be adopted by the Association of Tennessee Architects as the basis of charges for professional service.

G. W. Thompson suggested the discussion of the contract question, stating that all architects experienced great embarrassment and inconvenience in the present mode of letting contracts.

The chair stated that he had recently sent a communication signed by G. W. Thompson and himself, to the secretary of the Builders' and Traders' Exchange of Nashville. While it did not place the matter in just the shape in which it should come before the meeting, he would read a copy of the letter, which was as follows:

NASHVILLE, Tenn., February 8, 1887.

I. N. Phillips, Secretary Master Builders' Association, Nashville, Tenn.:

DEAR SIR,—Believing that the interests of the contractor and owner alike, as well as all other parties concerned, will be greatly promoted by letting contracts for buildings under two divisions only, the undersigned have adopted the following, relative to the preparation of specifications, and letting contracts for work from their respective offices:

1. Two specifications will be prepared, to-wit:

The "Masons' Specifications" and the "Carpenters' Specifications."

2. In the "Masons' Specifications" will be included: The brickwork, cutstone work, terra-cotta, plastering, grate-setting, pavements, and all work requiring the use of mortar, except the foundation work, which may be let as a separate contract.

3. In the "Carpenters' Specifications" will be included, the carpenters' work, galvanized iron work, tinning or other roofing, and the painting and glazing.

We are confident that such a division of the several trades required for the construction of a building will expedite the work when once begun, and insure its completion in a very much shorter time, thus making it more profitable to the builder and owner as well, from the fact that the builder will realize upon his work more rapidly, and the interest account of the owner is very much lessened thereby, if a commercial building, besides enabling the owner to occupy the building very much sooner from the date of its commencement.

Hoping to have your coöperation in this movement, we are, very respectfully, yours,

SMITH & SHARP,
GEO. W. THOMPSON.

A general discussion followed, by Smith, Thompson, Dismukes, Laurent, and others, in which it was developed that the present system of letting contracts devolved too much unnecessary labor upon the architect, and that work should be given to one general contractor, or perhaps two, and that these should let sub-contracts after the approval of the sub-contractors by the architect. It was finally decided to place the matter in the hands

of the Executive Committee, with instructions to formulate a system to be presented at the next meeting of the association.

G. W. Thompson reported Memphis as the unanimous choice of the committee as the place for holding the next annual meeting.

A vote of thanks was passed to the official board of the First Cumberland Presbyterian Church for the use of their lecture room by the convention.

A vote of thanks was also tendered R. C. McLean, "not only for his presence at the meeting, but for his valuable aid and suggestions in carrying out the work of the convention."

The convention adjourned to meet in Nashville the third Thursday in April, the place to be designated by the board of trustees.

Association Notes.

WESTERN ASSOCIATION OF ARCHITECTS.—Convention will be held November 16, 1887, at Cincinnati. J. F. Alexander, La Fayette, Ind., secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the first Saturday of every month, at 15 East Washington street, Chicago. Annual meeting first Thursday in October, 1887. Clarence L. Stiles, Chicago, secretary.

INDIANA STATE ASSOCIATION OF ARCHITECTS meets on the fourth Wednesdays of January, April, July and October of each year. Annual meeting fourth Wednesday in October. E. H. Ketcham, Indianapolis, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at Kansas City on the second Tuesday in January, 1888. Charles E. Illsley, St. Louis, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of August, 1887, at Spirit Lake. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 3, 1888. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Wichita on the third Tuesday of January, 1888. J. C. Holland, Topeka, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1887. F. B. Hamilton, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets semi-annually. Next meeting third Thursday in July, 1888, at Cleveland. F. A. Coburn, Cleveland, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets bi-monthly. Annual meeting third Thursday in February, 1888, at Memphis. T. L. Dismukes, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Austin on the third Tuesday of January, 1888. S. A. J. Preston, Austin, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October each year. F. M. Ellis, Omaha, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday, Builders' and Traders' Exchange. W. G. Williamson, secretary.

THE WESTERN SOCIETY OF ENGINEERS meets the first and third Tuesdays of each month at 4 o'clock, P. M., at 15 East Washington street, Chicago.

ARCHITECTURAL ASSOCIATION OF MINNESOTA.

The revised bill for the examination and licensing of architects in the State of Minnesota, presented to the senate by the state association, through Senator Sheffer, met with disaster, its consideration by that body having been indefinitely postponed by a majority opposition vote.

SOCIÉTÉ CENTRALE DES ARCHITECTES.

The officers of the Société Centrale des Architectes, of Paris, France, for the present year are as follows: President, M. Bailly; vice presidents, M. Hermant and M. P. Sédille; secretary, M. Paul Wallon; assistant secretary, M. Mounier; secretary of publications, M. Constant Bernard; librarian, M. Raulin; treasurer, M. Simon Girard. These addresses may be useful to American societies who may wish to communicate with the Société Centrale on some matter of architectural interest.

BUFFALO SOCIETY OF ARCHITECTS.

A circular letter has been sent to the most reputable architects in Western New York, by the Buffalo Society, calling for a conference looking toward the formation of a state association, and a respectable number of replies have already been received, all, with out exception, in favor of the proposed organization, so that the committee feel very much encouraged, and will push the matter to a speedy consummation. The Buffalo society is being rapidly extended in membership, including several draughtsmen as junior members, who are already members of the "Buffalo Architectural Sketch Club," a union that will be of benefit to both societies. A new departure has been instituted in the manner of conducting the business of the societies. Four standing committees have been appointed, one on "woods used in building," one on "building stone," one on "brick," and one on "limes and cements." The membership of these committees includes a junior member to each, who, while they have no vote or voice in the conducting of the business of the society, are thus brought actively into the work of accumulating a fund of information and samples on the subject in question. The society has not, as yet, felt strong enough to take up the many legislative matters that

will form one of the purposes of the state association when formed, but its members are disposed to use their best efforts to familiarize themselves with the materials which they constantly handle. With this end in view the committees have been appointed, whose duty it shall be to compile all possible information on the subject, and also to collect samples, properly labeled and classified, of which they hope to have a respectable exhibit. The committee on woods made a partial report at the meeting, March 2, bringing into the society thirty-four classified and labeled samples of local woods, finished on one side, and of uniform size. The informal discussion of these samples by the members present could not fail to be of interest to anyone interested in building, and the value of this class of the society's work can hardly be overestimated.

CHICAGO ARCHITECTURAL SKETCH CLUB.

The meeting on February 28 was well attended, and listened to an excellently delivered and very instructive talk upon ventilation by W. M. Green, of the Exhaust Ventilator Company.

The competitive drawings for a three-room village schoolhouse were handed in.

Mr. McLean submitted a proposition that the club make drawings for the title page of a menu card for the builders' and traders' banquet, which occurs March 31, which was accepted, the drawings to be submitted at the next meeting, March 14. They should be drawn on a sheet about five inches by eight inches or longer. It is deemed a good opportunity for the club to show its appreciation of the many courtesies extended it by the Exchange, and should be improved.

The Chicago Press Club are desirous of receiving designs for a monument for its lot at Rosehill Cemetery, and through Mr. Root asked the club to present a suitable design. A vote was taken, and the club unanimously agreed to submit competitive designs in a special competition, to be closed one month from date. The monument is to cost \$1,500, exclusive of the material (Georgia marble), which has been donated.

KANSAS CITY ARCHITECTURAL CLUB.

The draughtsmen of Kansas City organized an association February 21, with fourteen members, and elected as officers, J. Van Brunt, president; A. H. Ramsden, vice-president; Willis J. Polk, secretary; W. M. Kenyon, treasurer. The executive committee will consist of these officers and L. S. Curtiss. The proceedings of the club will be similar to those of the Chicago club, holding semi-monthly meetings, with monthly competitions, reading of papers, etc. The Kansas City Society of Architects is taking a lively interest in the club, and giving it much encouragement.

CINCINNATI ARCHITECTURAL SKETCH CLUB.

The draughtsmen of Cincinnati have organized a sketch club, with a membership of about twenty-five. The officers are: president, J. W. Adams; vice-president, L. G. Ditoe; secretary, Arthur Steadman. The club will meet every two weeks on Thursdays.

Our Illustrations.

Fireplace of endolithic marble, by Architects Berg & Clark, New York.

Competitive design elevation and plans for the Carnegie free library, at Allegheny, Pa., by James W. McLaughlin, architect, Cincinnati, Ohio.

Designs submitted in the Chicago Architectural Sketch Club competition for a 25-foot city front; by W. B. Mundie, first prize; W. R. Ray, second prize; R. M. Turner, third prize; F. O. Fraenkel and Richard Wood.

Club house for the Park Club, at north entrance to Rosalie court, South Park Station, by S. S. Benan, architect, Chicago. Brick; dimensions, 30 by 60 feet; first and second floors finished in hardwood; cost, complete, \$13,000.

The Pickwick, an eight-story apartment house, Chicago; Burnham & Root, architects. Brick; interior, including trimmings, doors, stairways, etc., finished throughout in butternut, by the C. J. L. Meyer & Sons Company, of Chicago. Apartments for fifteen families.

The Argyle, an eight-story apartment house, Chicago; Burnham & Root, architects. Brick; interior, including trimmings, doors, staircases, etc., finished in oak, by the C. J. L. Meyer & Sons Company, of Chicago. The Argyle and the Pickwick are the largest structures of this class erected west of New York, and are well planned for apartment purposes.

Residence for Mrs. Elizabeth T. Hoagland, northeast corner of Lake avenue and Fifty-first street, Hyde Park, Ill., by M. L. Beers, architect. The finish of main part of first story is of selected butternut with a furniture polish. The balance of the house is in clear pine, finished in the natural wood. One feature of the house is the "den," which is in the front octagon upon the second story stair landing. The house is fitted up with all modern conveniences.

PHOTOGRAVURE PLATES.

(Only issued to subscribers for the Photogravure edition.)

Residence of Wm. J. Watson, Chicago; Treat & Foltz, architects.
Residence of H. O. Warner, Chicago; Burnham & Root, architects.
Residence of Joseph Frank, Chicago; Burnham & Root, architects.
Residence of S. B. Barker, Chicago; Wheelock & Clay, architects.
Residence of F. G. Logan, Chicago; Wheelock & Clay, architects.

A CIRCULAR letter, issued by the Illinois Terra Cotta Lumber Company, of Chicago, states that the agency of E. D. Morris & Co. for the company had expired by limitation; that they are the sole owners for the rights of manufacture and sale of porous terra-cotta in the State of Illinois, and that the output of the company's factory had lately been considerably increased, and it was now able to furnish any quality or description of fireproof roofing material and hollow building tiles.

An Endolithic Fireplace.

THE question is often asked an architect: "What ought we to build the hall fireplace of?" The answer is usually, marble, stone, terracotta, tile, or a combination of the same. The most recent material used for this purpose, however, is endolithic marble. With this material it has become possible to build and to have a most artistic hall fireplace at moderate cost.

It will be seen from the illustration in this number, by Architects Berg and Clark, of New York, that is, as far as black and white will convey the idea, where color plays so large a part, that the designers have taken advantage of the possibilities offered by endoliths, and have produced a hall mantel, strong in design and beautiful in color. Indeed it would have been almost impossible to have obtained sienna and numidian in as large blocks, or as beautifully marked as the endoliths used in this mantel, and if obtainable, the expense would have been beyond all reason, while as it is the mantel costs very little. But then, it may be said, "Endoliths are imitations, and of doubtful durability." This is a misstatement, that can be best answered by a definition and an explanation. The definition is of the word imitation, while the explanation is the history and nature of endoliths. An imitation is a copy in another material, and generally inferior one, of something which we know it is not, as for example, marbleized slate and grained woods; we know they are only counterfeits or likenesses; but on the other hand, if a chemist should produce gold in his laboratory, it would be gold just as much as if he had got it out of a mine, and therefore not an imitation. This is just what has taken place in the discovery of endolithic marble. The chemist reproduces the operation of nature; using white marble as a base, he changes it through and through its entire substance into a colored marble, say sienna, which will yield the same constituents when subjected to chemical analysis, as that quarried; moreover, this being true, the matter of durability is also settled. Furthermore, endoliths have been in use some years without showing any sign of disintegration, but on the contrary, have proved themselves more durable than quarried marble.

Hand in hand with the discovery of endoliths, there were a number of new pigments brought to light—pigments having the wonderful property of entering the marble vertically, at right angles with the surface, so that a picture, or any design painted with them, can be forced below the surface and afterward the marble polished, making in this way an imperishable decoration. What! paint marble? Yes, why not? Because it is bad art. Not if we are to believe the Greeks, who in the best period of their art not only painted the subordinate details of their white marble and stone buildings, but sometimes the entire edifice; not if we are to believe the Gothic architects, who used color freely upon the stonework of their churches, shrines and tombs, as witness the Rochester cathedral, with its stone shafts and arches painted alternately red, green and yellow. The only possible objection to the legitimate use of paint is its lack of permanence, an objection met by endolithic pigments, which have the quality of permanence in the highest degree. If there was ever an excuse for mosaics, whose value depends upon their durability, there is a two-fold reason for using endoliths—first, because they are as durable; secondly, because they are free from the disagreeable cement lines. Architects Berg and Clark have used in their mantel, and it seems with great success, almost all forms of endoliths.

Railroad Notes.

For several years the Michigan Central has had in its Atlantic express a most admirable and convenient through car line from Chicago to Boston and other New England points, and its popularity has steadily increased. It has enjoyed a great advantage over its competitors, not only in the directness of its route and the splendid scenery of Niagara Falls, Central New York, the Mohawk, Hudson, Housatonic and Connecticut valleys, and the Berkshire Hills, but in its connections with the great four-track New York Central and double-track Boston and Albany and its splendid equipment, making fast time with sureness and with safety.

In the arrangement of grand excursions the Missouri Pacific Railway takes the lead. Its California excursions, leaving St. Louis and Kansas City about twice a month for Los Angeles and San Francisco, at a round trip fare of \$72 for some eight days' steady travel, are well known and very popular, being particularly attractive to winter tourists, from this being the southern route, free from the dangers of snow blockades. This road now offers a new attraction in a grand excursion to the City of Mexico, to leave Chicago, Detroit, St. Paul, Louisville and other leading cities on March 8, and St. Louis and Kansas City a day later. The entire fare for the round trip is only about \$100. Tickets are good for sixty days, and can be extended on application, and the excursion will be attended all the way by a special superintendent to care for the comfort of the tourists, both in their own land and in Mexico.

Synopsis of Building News.

Abilene, Kan.—Architect Geo. W. Shaffer reports: Outlook very promising. For L. B. Johns, two-story and attic frame dwelling, 36 by 42 feet; stone foundation; steam heat, mantels, etc.; cost \$4,000; under way.

Buffalo, N. Y.—Architects Silsbee & Marting report: Ingersoll Memorial Chapel, corner of Jewett and Summit avenues; cost \$20,000. For C. B. Germain, residence; cost \$15,000.

Architects M. E. Beebe & Son report: For A. G. Hatch, stores; cost \$12,000. For J. S. Grimms, stores; cost \$30,000.

Architects C. K. Porter & Son report: For Bronner Bros., storehouse; cost \$10,000. Architect L. Sainger reports: For Coöperative Brewing Company, storehouse; cost \$30,000. For Clinton Brewing Company, sheds and barns; cost \$5,000.

Architects Green & Wicks report: For Granger & Co., "Granger Block"; cost \$60,000; Schmidt & Bro., builders. For Geo. H. Lewis, "Niagara" Hotel; cost \$100,000; Chas. Berick, builder. For Dr. Roswell Park, residence; cost \$10,000.

Architect Geo. J. Metzger reports: For Riverside Driving Park, stock barn; cost \$10,000.

Architect W. W. Carlin reports: For Emanuel Levi, stores and flats; cost \$30,000; J. H. Tilden, builder.

Caro, Mich.—City Clerk reports: City Hall, 85 by 70 feet, two stories and basement, brick, with stone and iron trimmings; cost \$6,000; not yet let; to be commenced about April 1; H. S. Hollister, architect.

Chicago, Ill.—The tendency toward dwellings of moderate cost, both for owners' occupancy and rental, stores and flats, rather than large structures, seems to gain as the spring work begins to show in the contractors' hands for execution. There will be a larger number of costly residences built this year than for several years past. The weather favors building, and though excavators have to wedge the top crust, the frost is not deep, and building is exceedingly active throughout the city.

Architects Edbrooke & Burnham report: For Frank H. Ray, three-story building, 64 by 180 feet, 1446-8 Wabash avenue; to be used as a livery stable, store and laundry, with apartments above; pressed brick, with Vermont island stone, copper and terra-cotta trimmings, galvanized iron cornice, composition roof, iron channels, beams, etc.; skylights, stained glass, closets and bath, carriage elevator; cost \$25,000; John Angus, mason; Alex. McIntosh, carpenter; building under way. For Frank Gazzolo, four-story store and office building, 40 by 50 feet, 86 and 88 West Madison street; Amherst stone and iron front; galvanized iron cornice, composition roof, iron channels, beams, etc.; skylights, closets, bath, etc.; cost \$25,000; under way; John Angus, mason; E. Moore, carpenter. For W. J. Edbrooke, three two-story residences, 50 by 55 feet, on Forty-first street near Drexel; brick, stone trimmings, galvanized iron cornice, composition roof, skylights, stained glass, closets and baths, wood mantels, hot air heat, electric bells, speaking tubes; cost \$12,000; under way.

Architect W. G. Barfield reports: For J. H. Allen, two-story frame dwelling, 27 by 40 feet, at Woodlawn; stone basement, hardwood finish, stained glass, closets and bath, hot-air heat, wood mantels; cost \$3,000. For A. Berg, brick and stone residence on Wabash avenue near Thirty-fifth street; cost \$10,000. For John O'Malley, three-story stores and flats, 125 by 150 feet; brick, stone trimmings; cost \$22,000.

Architect W. W. Boyington reports: Contracts for addition to L. S. & M. S. and C., R. I. & P. R'y Depot have been let as follows: Masonry, Wm. Munson; carpentry, Thos. Clark & Son; ironwork, Dearborn Foundry Co.; fireproofing, Wight Fireproofing Co.; steam-heating, Hay & Prentice Co.; plumbing, Hugh Watt; painting, J. B. Sullivan & Bro.; terra-cotta, Northwestern Terra-Cotta Co.; roofing, Wm. Powell & Co.; tile roofing and copper work, Wm. B. White; total cost of improvement \$107,000. Contracts for additional story to the National Life Building were let as follows: Carpentry, Gordon & Covil; ironwork, Bouton Foundry Co.; skylights, Wm. B. White.

Architect Alfred Smith is taking figures on buildings of C. H. Jordan, for which plans were made last spring. They include a three-story and basement store and flat building, 25 by 80 feet, on West Madison street, opposite Page, to cost \$10,000, and two two-story residences, 48 by 69 feet, pressed brick and stone; cost \$13,000; work to be commenced at once.

Architect Clarence L. Stiles reports: For Gabriel Frauchere Owen, two-story tenements, 143 by 50 feet, corner of Sibley street and Vernon Park place, brick, composition roof, galvanized iron cornices, closets and bath, slate mantels, electric bells, speaking tubes, etc.; cost \$18,000; J. W. La Croix, mason; Billie & Ducasse, carpenters. For David Graham, two-story frame cottage, in Woodlawn, closets and bath, stained glass, hot air heat, hardwood finish, wood mantels, electric bells, speaking tubes, etc.; cost \$4,000.

Architect W. I. Beman: For E. L. Jayne, two-story frame dwelling; cost \$5,000. For A. W. Hayward, two-story and basement dwelling 44 by 52 feet; cost \$8,000. For R. A. Shailer, two-story and basement dwelling; cost \$9,000. For C. E. Seaton, two-story and basement dwelling; cost \$8,000. For E. F. Gordon, two-story dwelling; cost about \$8,000.

Architect Wm. H. Drake: For Dr. Quinlan, brick warehouse, 40 by 90 feet; cost \$15,000 to \$20,000. For P. Ewan, five-story hotel building, 90 feet front on West Madison street, near Jefferson street.

Architects Treat & Foltz: For H. Van Schaak, ten two-story and basement dwellings, 20 by 40 feet each, on Lawrence avenue; cost \$26,000.

Architects Jenney & Otis: For Dr. Tucker, three-story and basement residence, 22 by 70 feet, on Dearborn avenue; granite front; cost \$13,000.

Cincinnati, Ohio.—Reported by Lawrence Mendenhall. Until the building season fairly opens, the gleaming of notes that will interest the readers of architectural journals, is not an easy task. Of course at this time of year extensive improvements are talked about, and land and improvement syndicates formed, but as all that glitters is not gold, so do these fail to materialize in every instance. But I am safe in asserting that suburban building will partake of the nature of a boom this season, but consist mainly of the medium-priced houses.

The cable and elevated railroads projected and completed, have done much toward opening this "Pandora box" to our architects, who are, by the way, entirely too modest.

The young draughtsmen of the city have organized the Cincinnati Architectural Sketch Club. The officers are good, live young men, and competent, namely: President, J. W. Adams; vice-president, L. G. Dittoe, and secretary, Arthur Stedman. They meet on Thursday twice a month.

Our Builders' Exchange took formal possession of their new quarters on February 24, in Mechanics' Institute building, the cradle in which many of our now prosperous mercantile associations were rocked. They have now no reason to be ashamed of their rooms, and can boast of not only clean, light rooms, but of having a live organization.

The Building Exhibit Co. have elected Wm. H. Stewart, president, and L. H. McCameron, secretary, both live men.

The new Army is now a settled fact, and the trustees are advertising for a lot upon which to build. The amount appropriated is \$100,000.

On my rounds, the following notes were obtained:

Architect Jas. W. McLaughlin is preparing plans for a new bank building for the First National Bank of this city. The present building is a three-story brick, which does not denote the solid condition of its occupant. The basement or first floor will be granite, and the remaining two of pressed brick, with terra-cotta, gables, and tourelles, and fireproof construction. The size of structure is 55 by 75 feet, and will cost \$80,000.

Architects Forbush & Green report: Alteration for the Merchants' National Bank, and a safety deposit vault, costing \$13,000. A residence for Alvin Patton, Esq., built of brick and frame, with shingle roof, containing nine rooms; cost \$5,000.

Architect Geo. W. Rapp reports: A residence and store for B. Ellermann, Esq., containing eighteen rooms, pine finish, tin roof. For J. E. Lapp, alterations and additions of store. For the Jno. Kaufmann Brewing Co., a new brew house, 32 by 70 feet, of brick and terra-cotta; cost not known. Mr. Rapp is perfectly at home in all that pertains to brewery work, and has several fine buildings to make this assertion good.

Architect Henry E. Siter has his time well employed with the following: Remodeling the Ohio Valley National Bank; remodeling the Market National Bank. For Mr. Abe Fuest, two new store fronts of iron for a remodeling job. For Wm. Corry, Esq., a frame house of six rooms, with slate roof and pine finish. For H. H. Vaile, Esq., a row of five houses of brick and frame, eight rooms each, with slate roof; quite picturesque. For Mr. O. Reish, a beautiful brick and frame residence of two and a half stories, ten rooms, slate roof, etc. For Mrs. N. A. Jeffries, a frame house of 12 rooms, with slate roof.

Architects Buddemeyer, Plympton & Trowbridge report: For Chas. W. Bell, a brick residence two and a half stories, nine rooms, pine and white walnut finish, and slate roof; cost \$5,500. For H. M. Lane, a picturesque half timber and shingle residence, containing seven rooms; cost \$3,000. For Chas. Rosenstill, a four-story brick tenement building for six families; cost \$4,000; time well employed, and good prospects.

Delphos, O.—Architects Kendrick & Shrimpton, of Fort Wayne, Ind., report: For Catholic Society, a parochial school building; to cost \$10,000.

Dubuque, Ia.—Architects F. Heer & Son report: Present prospect for the spring is very promising; the following projected work: St. Catharine, German Catholic church, 40 by 86; cost \$4,500, contracted. Church at Osage, Ia., 40 by 88; cost \$4,000 contracted; N. Thill, Dyersville, Ia., residence, 32 by 38; cost \$4,000; T. Minke, Same place, store 25 by 60; cost \$2,500. Mrs. Mohr, same place, residence 25 by 35; cost \$4,000. P. Keine, Dubuque, store and dwelling, 26 by 40, cost \$2,000. Mrs. Kunze, same place, residence 22 by 34, cost \$2,500. Mr. Piekenbrok, same place, remodeling residence, cost \$3,000. Store, McGregor, Ia., 25 by 60, cost \$3,000. Contracts let for Church Sacred Heart at Dubuque, cost \$36,000. Residence T. Ruegmer, 22 by 34, contracted; cost \$2,000.

Architect F. D. Hyde, reports: For G. B. Birch, remodeling large brick residence, adding new slate roof and attic story, new carriage porch, bays, etc.; cost about \$4,500. For W. S. Bradley, block of three two-story and attic brick residences, 60 by 56 feet; cost \$8,000; plans in preparation. For A. A. Cooper, two-story and attic stone residence, 45 by 70 feet, slate roof; cost \$30,000; plans in preparation.

Emporia, Kan.—Architect George W. Shaffer, of Abilene, reports: For W. C. Simpson, two-story frame dwelling, 33 by 54 feet, stone foundation, mantels, etc.; cost \$3,000; plans completed.

Englewood, Ill.—Architect W. W. Boyington, of Chicago, reports: For J. Ingram, five three-story stores and flats, brick, terra-cotta trimmings; cost \$30,000; J. Ingram, builder.

Florence, Kan.—Architect George W. Shaffer, of Abilene, reports: For Albert M. Howell, two-story frame dwelling, 32 by 36 feet, stone foundation; cost \$2,500.

Fort Wayne, Ind.—Architects Kendrick & Shrimpton, report: For J. C. Peters, remodeling and additions to hotel building; cost \$15,000. For St. Vincent asylum, stable; to cost \$3,000.

Great Bend, Kan.—Architect Z. O. Fligg reports: Outlook good. For A. C. Fair & Bro., two-story business block 100 by 100 feet, pressed brick front, stone trimmings, galvanized iron cornice; cost \$16,000. For Moses Bros., and A. J. Buckland, two-story business block, 50 by 80 feet, pressed brick front, stone trimmings; cost \$8,000. Plans on the boards.

Hartford, Conn.—Architect Clarence L. Stiles, of Chicago, Ill., reports: For Mrs. M. J. Merrill, two two-story residences, 50 by 62 feet, Philadelphia pressed brick, Connecticut brownstone, tin roof, galvanized iron cornices, skylights, closets and bath, wood mantels, electric bells, etc., etc.; cost \$10,000; contracts to be let in Hartford.

Hudson, Wis.—Simon Hunt, superintendent of schools, reports: A new school house to be erected, for which plans will be adopted within the month of March.

Ironton, Ohio.—Architect A. Druiding, of Chicago, Ill., reports: Plans prepared for St. Lawrence Church; to cost \$24,000. Also for St. Joseph's church; to cost \$25,000.

Kalamazoo, Mich.—Architect M. W. Roberts has prepared plans for a two-story school house, 74 by 76 feet; brick, Amherst or Berea stone trimmings, galvanized iron cornice, closets, stained glass, furnace heat, hardwood finish; cost \$14,000; contracts not let.

Leavenworth, Kan.—Architect A. Druiding, of Chicago, Ill., reports: For Fort Leavenworth Catholic Church, 45 by 80 feet; pressed brick, stone trimmings; cost about \$10,000.

Little Rock, Ark.—Architect F. Harding reports: For J. E. Biscoe, two-story frame residence, 38 by 65 feet; contract not yet let.

Architects Petitfer Bros. reports: For Peter Hauger, brick block of four stores; cost \$4,000.

A bill has been introduced in the state senate to appropriate \$20,000 for additional buildings at the Arkansas Industrial University.

Louisville, Ky.—A general and healthful activity in real estate has been inaugurated, which will probably escape the unhealthfulness of a boom, but will raise the price of real estate generally and stimulate building.

The Walnut street Baptist church congregation have again considered the building of a church edifice, and have decided to ultimately erect a building to cost not less than \$100,000. At present they propose building the chapel at a cost of about \$18,000, arranged so that it will serve all the purposes of church and Sunday-school services, and in about five years build the main edifice. They propose to secure the plans by competition, confined to local architects. There is a movement on foot to establish a builders' and traders' exchange. There are now associations of master carpenters and master painters, and the general wish among both architects, contractors and material men is that an exchange should be established.

Plans are under advisement for a home for fallen women, to be erected this summer. Architect C. J. Clarke has prepared plans for rebuilding the workshops of the Kentucky penitentiary at Frankfort, recently destroyed by fire.

Architect D. Y. Murphy has made plans for extensive additions to the Ohio Falls Car Works.

Plans for a large hotel at Sheffield, Tenn., are being made by Architect H. Wolters. Architects McDonald Bros. have been appointed architects for the new Odd Fellows hall and opera house at Aurora, Ind.

Mr. Oscar Haupt, for a number of years chief draughtsman in the office of Mr. Mason Maury, and under whose superintendence the Kenyon building was constructed, has located in Birmingham, Ala., and has been intrusted with the erection of a number of dwellings and business houses.

The Stonemasons' Union has adopted a schedule of prices which, if acceded to by the master masons, will increase the cost of rubble masonry from 10 to 15 per cent. The effect of this will be that rubble masonry will be very little in demand, inasmuch as brick foundations can be laid cheaper, and some of the architects have already signified their intention to use brick instead of stone for underground work, should the increased prices of labor be kept up by the Stonemasons' Union.

Architects are busy preparing for spring work, and a number of large dwellings and stores are spoken of.

Manton, Mich.—Architects Wm. Johnson & Thos. Emery, of East Saginaw, report: For School Board, two-story school building, 79 by 49 feet, brick, stone trimmings, galvanized iron cornice, tin roof, furnace heat, iron channels, beams, etc, hardwood finish; cost \$8,000; to be commenced at once; I. F. Gillespie, Traverse City, contractor.

McPherson, Kan.—Architect Geo. W. Shaffer, of Abilene, reports: For Amos E. Wilson, two-story frame dwelling, 36 by 48 feet, stone foundation, mantels, etc., cypress wood finish; cost \$3,500; plans completed. For J. R. Fisher, two-story and attic frame dwelling, 39 by 54 feet, stone foundation, steam heat, mantels, tiling, etc.; cost \$7,000; plans completed.

Milwaukee, Wis.—Architect A. Druiding, of Chicago, Ill., reports: St. Joseph's Convent, to be erected in Greenfield Park, 386 feet front, four stories high; cost \$115,000.

Architects E. V. Koch & Co. for C. Borchard, stone business building, to cost about \$20,000. For Wm. Ballou, residence, to cost about \$10,000. For H. Lowenbach, frame residence, to cost \$6,000.

Architect S. S. Beman, of Chicago: For H. L. Palmer, brick and stone residence; cost \$25,000.

Architects E. Townsend, Mix & Co.: For J. S. Harvey, frame dwelling; cost \$8,000; also remodeling residence for J. G. Flint; cost \$5,000.

Minneapolis, Minn.—Among the building permits recently issued are the following: F. W. Chase, two-story frame laundry building; cost \$5,000. S. E. Foster, three-story brick stores; cost \$9,000. Chute Bros., one-story brick store building; cost \$8,000. C. Mengelkoch, three-story brick store; cost \$8,000. Sol. Smith Russell, residence; cost \$12,000. C. G. Van Strum, brick store building; cost \$8,000. A. H. Paus, brick store building; cost \$8,000.

Nashville, Tenn.—This city is in the midst of a genuine full-fledged real estate "boom." A great deal of the property that is rapidly rising is outside the city, and here, in many cases, the values may be called fictitious, but inside the city the price of property has been far below that of corresponding districts in either cities, and the rise is natural and will place the city in a better position and make general business as well as building more active. The competition for a Y. M. C. A. building was close, and the design of Architect G. W. Thompson was accepted.

A Builders' and Traders' Exchange has just been organized, with a membership comprising most of the best contractors and material men in the city.

Rockford, Ill.—City clerk reports: The city architect has prepared plans for engine house, brick, two stories; cost \$2,500; to be completed in November; O. Truman, general contractor; building under way.

Saginaw, Mich.—Architect F. W. Hollister has prepared plans for a two-story frame, veneered with brick, seminary building, 54 by 72 feet, for the Evangelical Synod of Michigan; cost \$8,000; to be completed August 13, 1887; Schwarz & Ruff, contractors.

Springfield, Mo.—Architect W. E. Foley reports: Two-story school house, 58 by 62 feet; shingle and tin roof; cost \$7,000; not let.

St. Louis, Mo.—Architect T. B. Annan: For the Hall Estate, two-story store and flat building, 75 by 50 feet; cost \$10,000. For Mrs. S. W. Griffith, two three-story brick dwellings, 40 by 53 feet, stone trimmings, slate roof; cost \$10,000; W. B. Harter, contractor.

Architects Geo. I. Barnett & Son have prepared plans for J. E. Kaine, for block of nine dwellings, 16 by 48 feet each; cost \$16,000.

Architect J. H. McNamara: For Louis Ottrund, three-story residence, 34 by 69 feet, brick, stone front, slate roof; cost about \$8,000.

Architect A. M. Baker: For Wm. Corbett, two-story residence, 21 by 60 feet; cost \$4,200. For Mathew Devlin, four two-story brick dwellings; cost \$7,000.

Architect Geo. W. Pieppers: For Bowman Dairy Co., two-story store and flats, 45 by 58 feet; cost \$16,000.

Architect J. W. Herthel: For Evangelical Society, one-story brick church, 44 by 80 feet; cost about \$8,000.

Architect Thomas Walsh, who has prepared plans and is superintending the erection of the new college church, and St. Louis University buildings, on Grand avenue, between Lindell avenue and Pine street, has taken out a permit for the erection of the university building, the cost being given at \$196,000. This only includes the university proper, and the residence for the professors and scholastics. The university hall, which will be built on the Pine street side of the college property, will be built on another permit. The foundations of the university and residence for the professors are almost completed, and it is calculated that the brickwork will be commenced in the early spring. The work will be pushed rapidly when the foundations are completed, and the buildings will be ready for occupancy about a year hence. It is estimated that it will cost about \$100,000 extra to finish and furnish the institution.

St. Paul, Minn.—Among the permits recently issued are J. T. McMillan, two-story brick dwelling; cost \$15,000. Dowling & Ruse, two-story frame tenement; cost \$6,000. G. Gustavson, two-story brick store; cost \$5,000. Peter Fehlen, two-story brick store and dwelling; cost \$8,000.

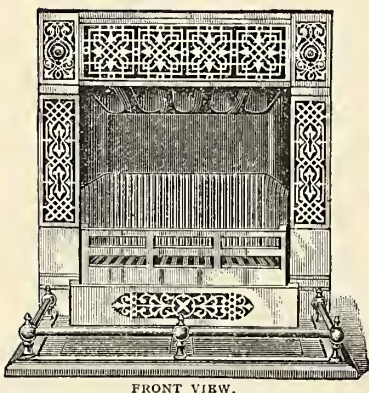
Van Buren, Ark.—Geo. Wood is to build a two-story brick business block, 30 by 115 feet.

Water's Penn. Oil Co. will build a large oil tank to supply the western trade. A canning factory is soon to be erected here.

Wichita, Kan.—Architects Patton & Fisher, of Chicago, Ill., report: For Fairmont College, three-story college building, 120 by 100 feet; brick, stone trimmings, slate roof, skylights, closets, steam heat, hardwood finish, electric bells, speaking tubes, etc; Building to be commenced April 1. Bids to be opened in Wichita. Rev. J. H. Parker, president board of trustees.

Winfield, Kan.—Architects Nier, Hogg & Bryam, of Kansas City, Mo.: For C. Ferguson, stone store building, 46 by 100 feet; cost \$15,000. For H. P. Albright, stone store building, 46 by 80 feet; cost \$10,000.

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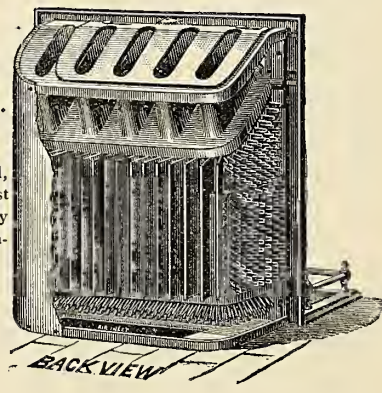
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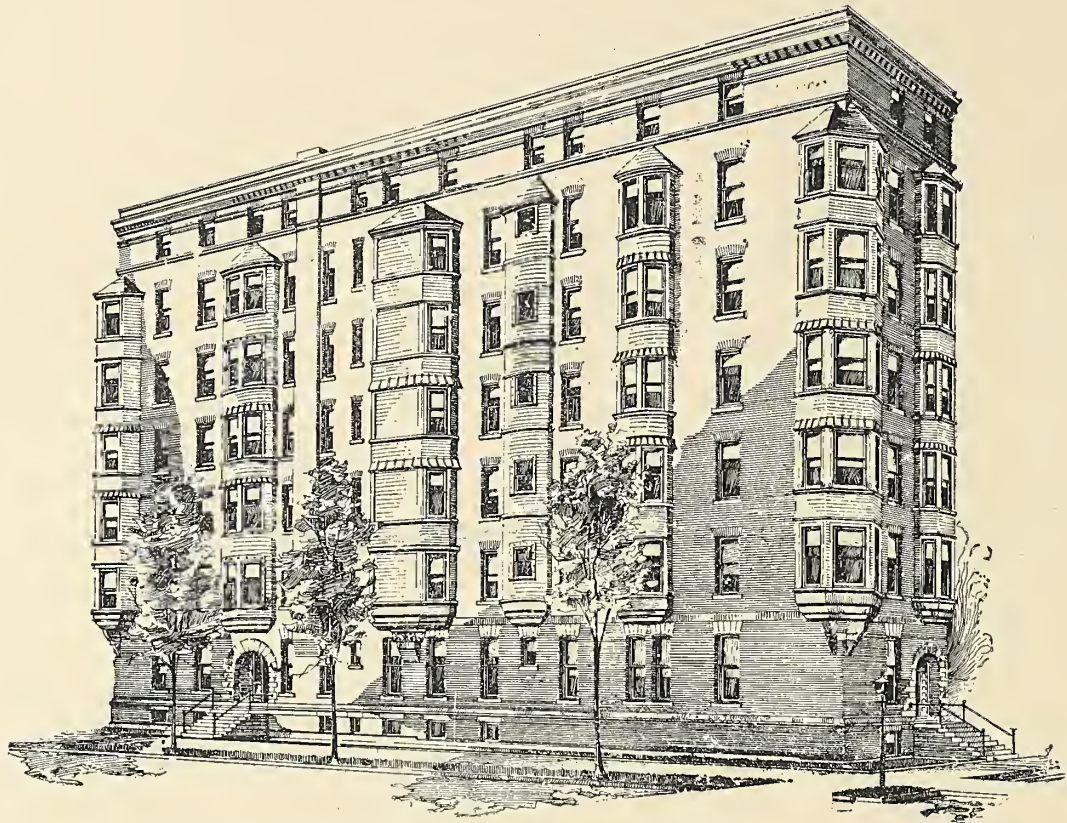
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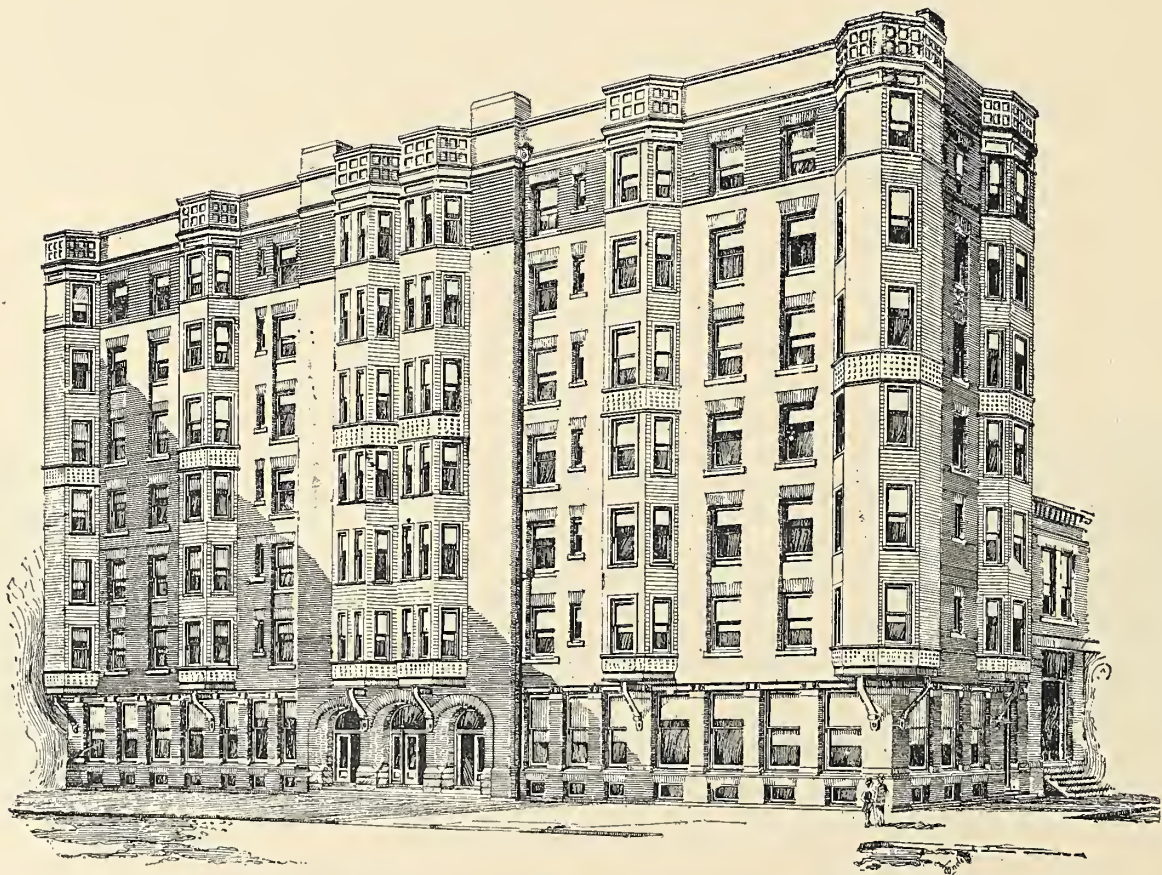
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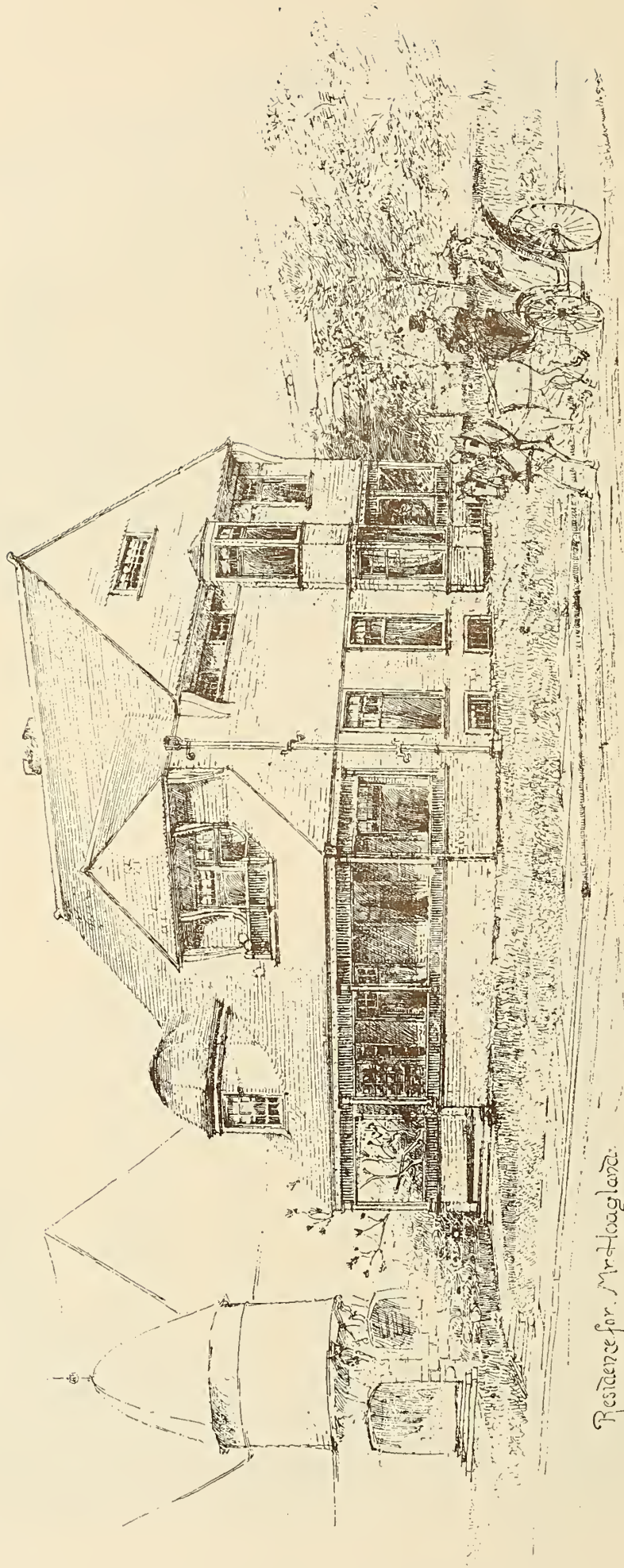
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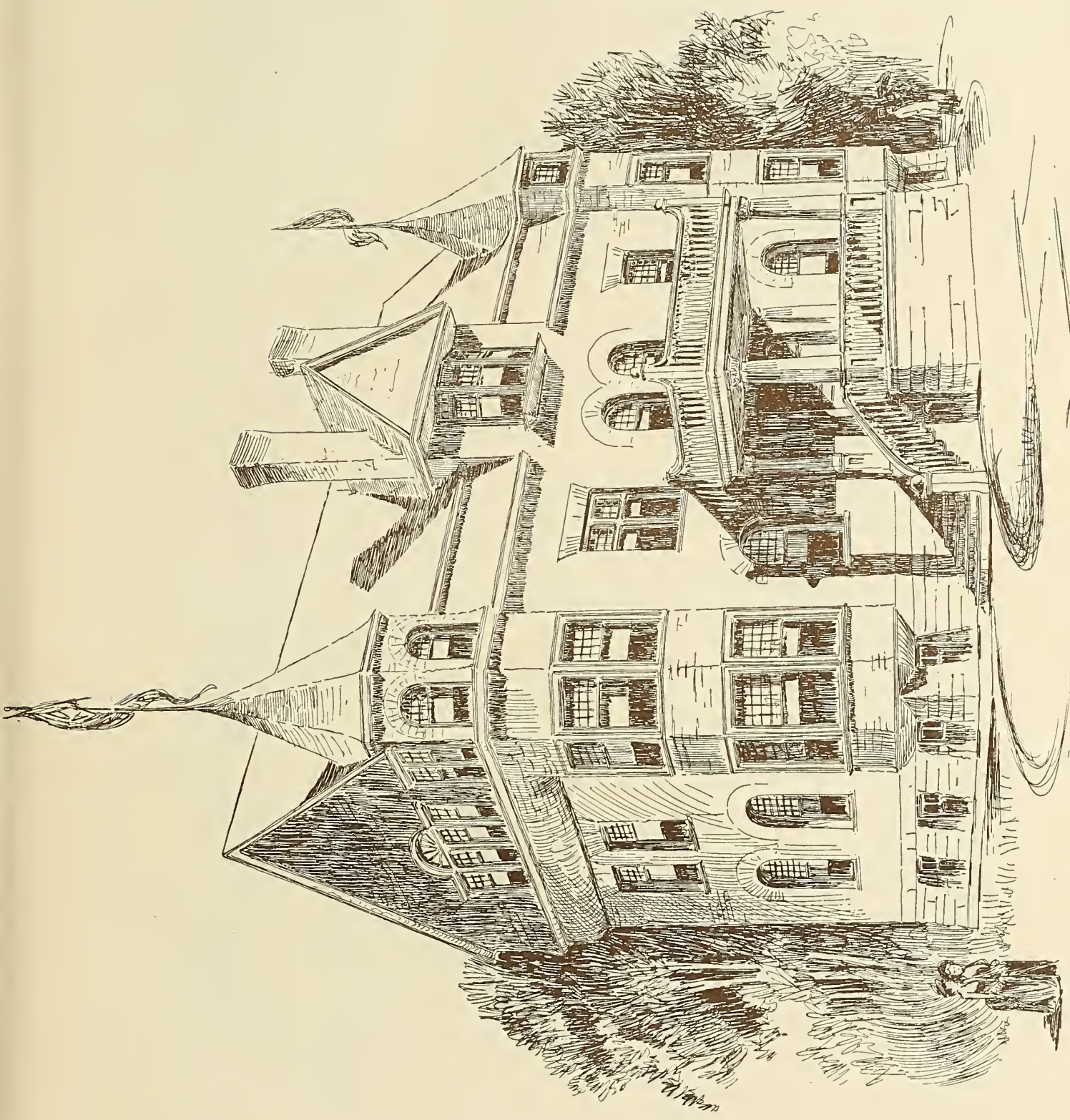


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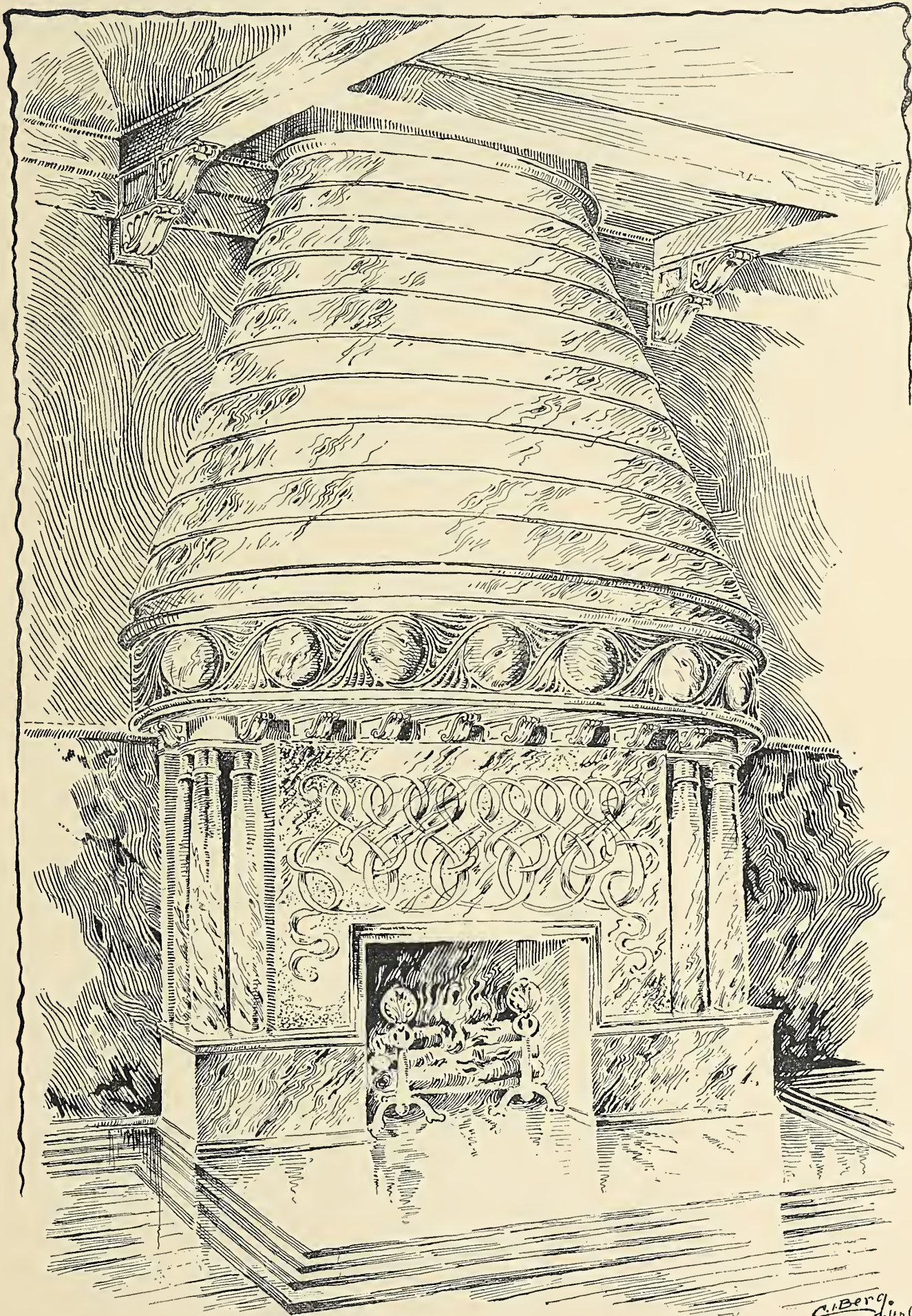
BURNHAM & ROOT, ARCHITECTS.



Residence for Mr. Haugland.
M. L. Beers Archt.

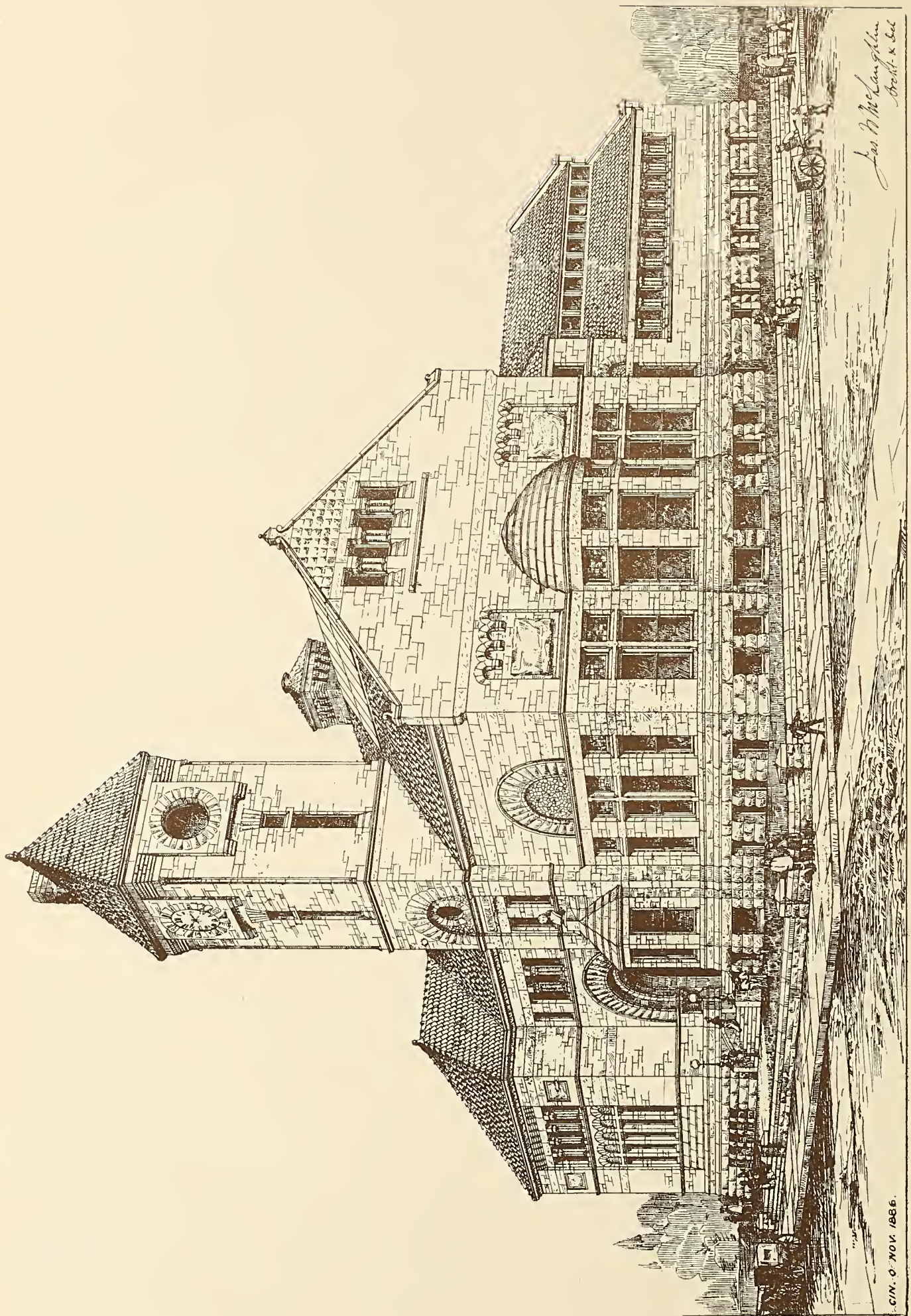


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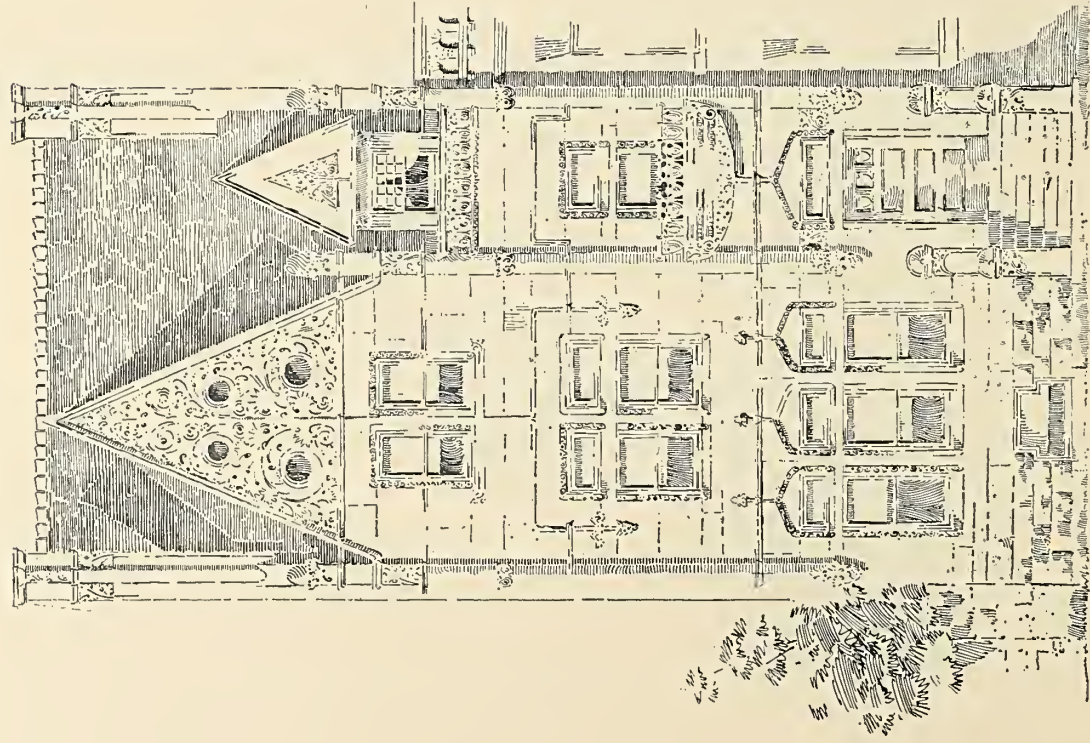
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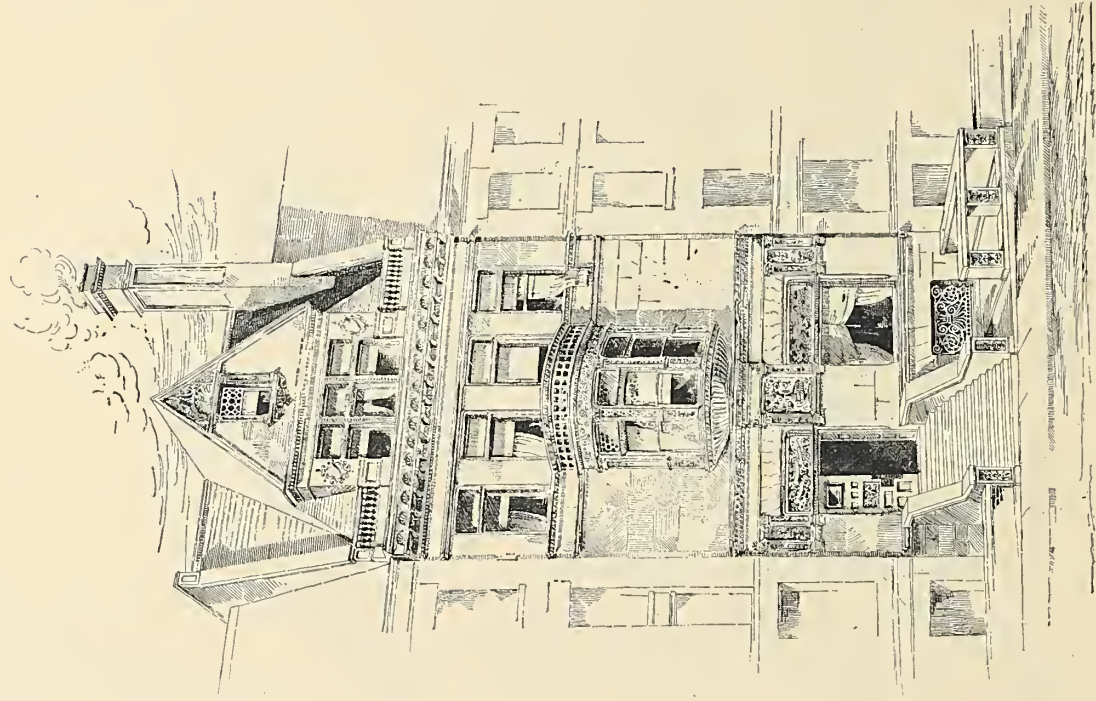


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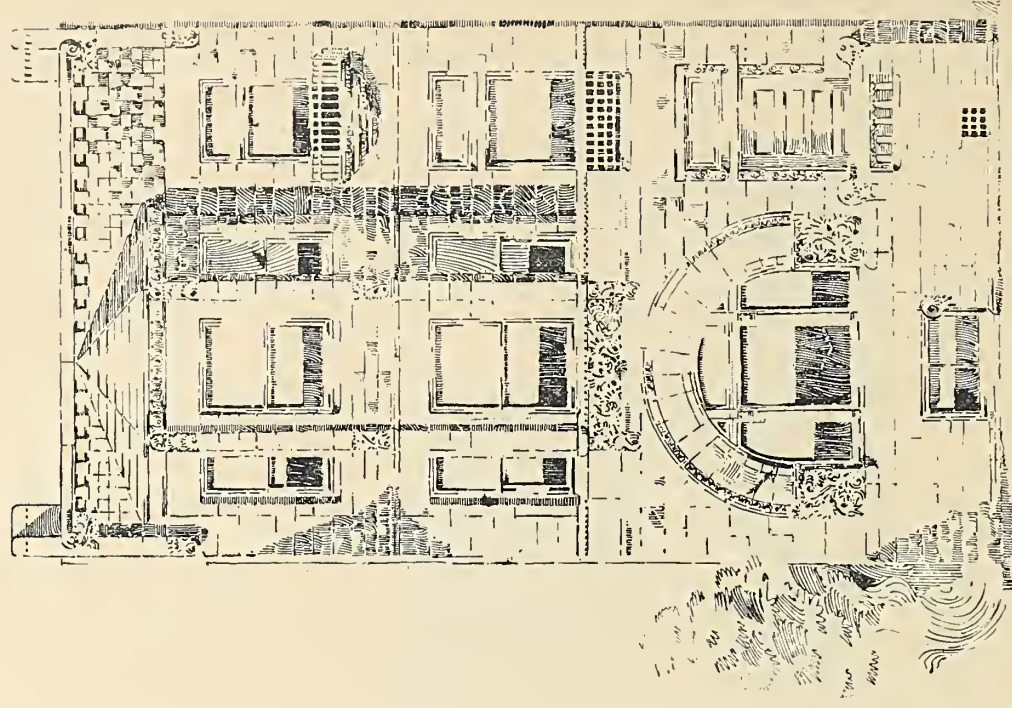
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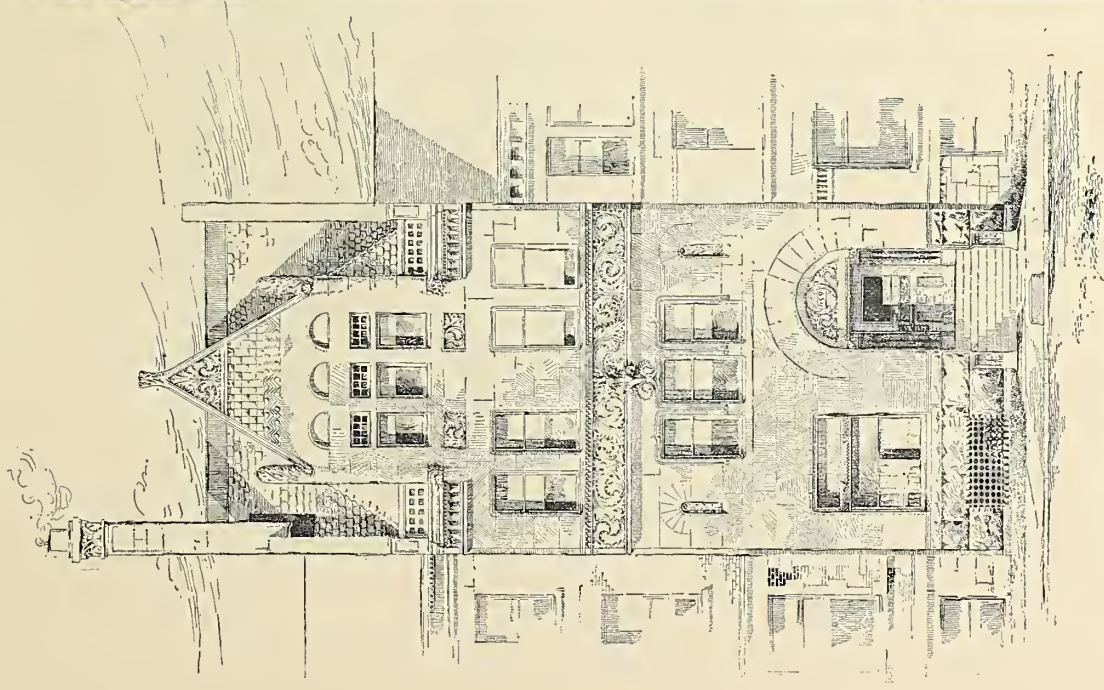
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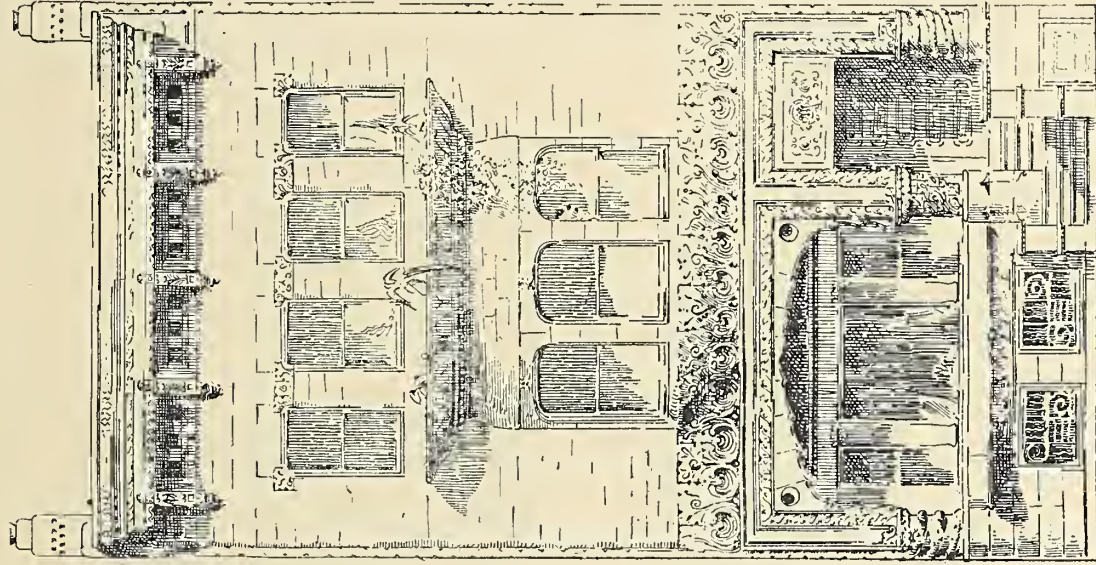
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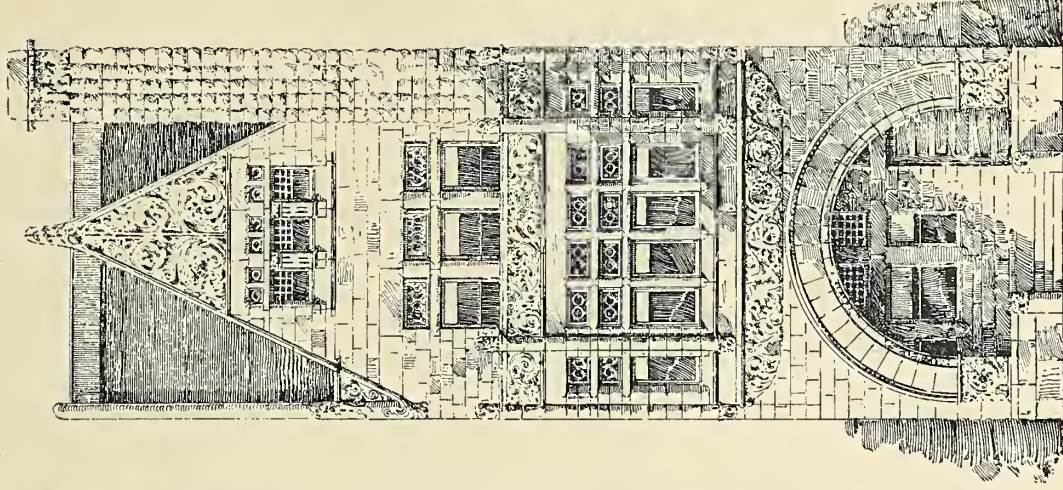
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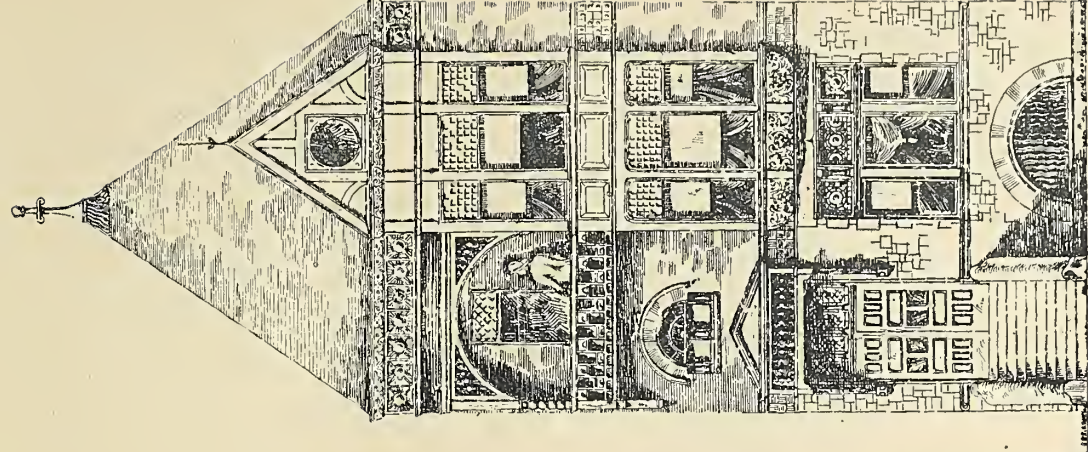
FIRST CHOICE, W. B. MUNDIE.



SECOND CHOICE, W. R. RAY.

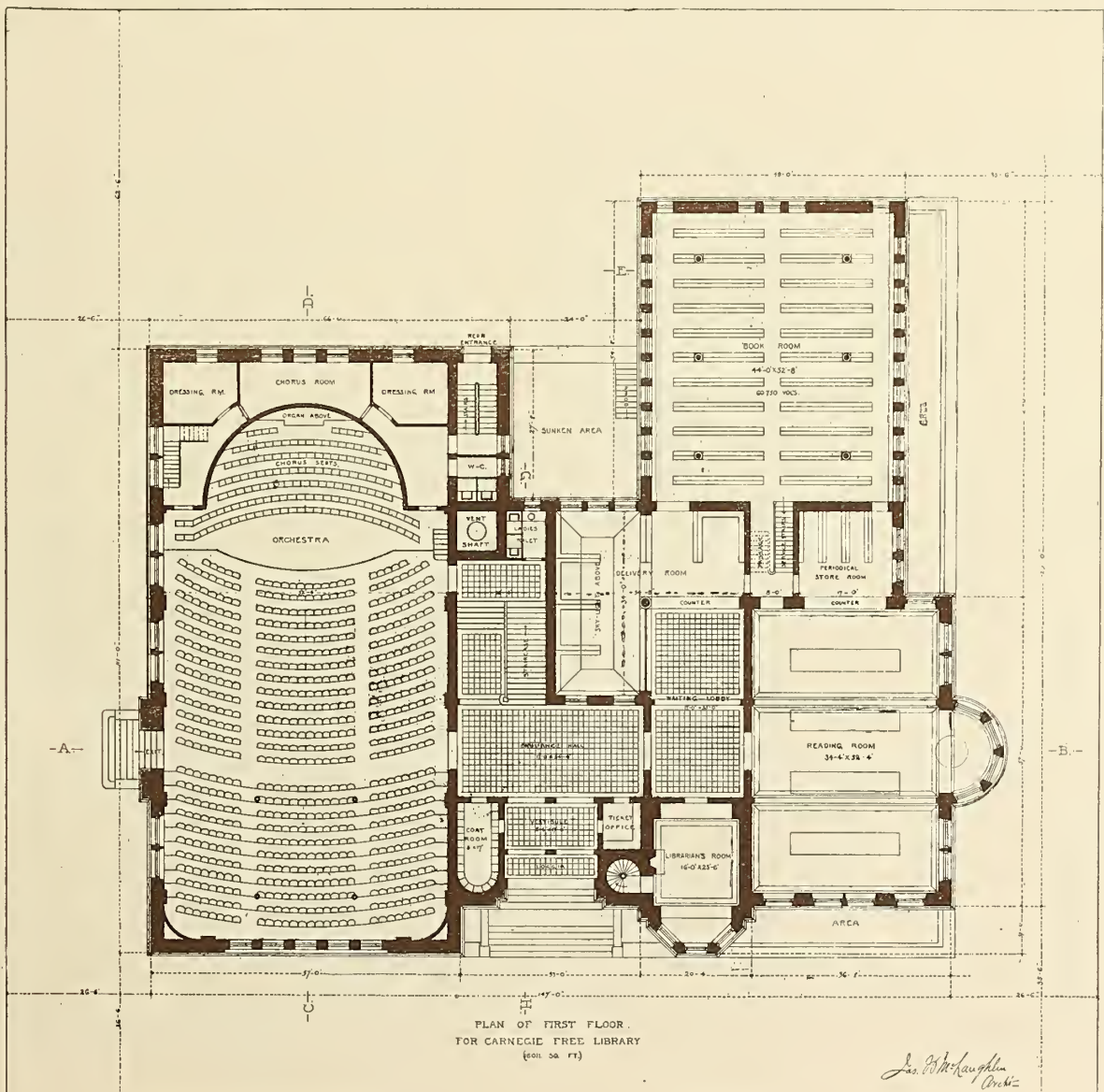


THIRD CHOICE, R. M. TURNER.



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APRIL, 1887.

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Committee on Raising the Standard of Professional Requirements for membership—L. H. Sullivan, Chicago; I. Hodgson, Minneapolis, Minn.; George B. Ferry, Milwaukee, Wis.
Committee on Procuring Architectural Drawings and Photographs for Exhibition at the next Convention of the Western Association—The executive committees of state associations.
Committee to take charge of the Bill Governing the Office of Supervising Architect of the United States—Dankmar Adler, Chicago; D. H. Burnham, Chicago; J. F. Alexander, La Fayette, Ind.
Committee to Represent the Western Association at the next Annual Convention of the American Institute—John W. Root, Chicago, Ill.; J. F. Alexander, La Fayette, Ind.; Sidney Smith, Omaha, Neb.
Committee on Collection of Statistics on Competitions—C. E. Illsley, St. Louis, Mo.; Sidney Smith, Omaha, Neb.; E. H. Taylor, Cedar Rapids, Iowa; G. W. Rapp, Cincinnati, Ohio; J. F. Alexander, La Fayette, Ind.
Committee on Statutory Revision—Dankmar Adler, Illinois, chairman; Sidney Smith, Nebraska; I. Hodgson, Minnesota; J. F. Alexander, Indiana; C. H. Lee, Iowa; E. O. Fallis, Ohio; A. E. Cobby, Dakota; Chas. K. Ramsey, Missouri; J. S. Mathews, Wyoming; S. J. Osgood, Michigan; C. A. Curtin, Kentucky; E. Townsend Mix, Wisconsin.
Committee on Formation of State Associations—J. F. Alexander, La Fayette, Ind.; Chas. K. Ramsey, St. Louis, Mo.; E. H. Taylor, Cedar Rapids, Iowa; I. Hodgson, Minneapolis, Minn.; H. P. McDonald, Louisville, Ky.; Geo. W. Rapp, Cincinnati, Ohio; G. B. Ferry, Milwaukee, Wis.; Sidney Smith, Omaha, Neb.; G. W. Thompson, Nashville, Tenn.; T. Sully, New Orleans, La.; S. J. Osgood, Grand Rapids, Mich.; J. G. Haskell, Topeka, Kas.; S. A. J. Preston, Austin, Texas; Mrs. Louise Bethune, Buffalo, N. Y.
Committee on Legal Decisions Relating to Building Interests—J. J. Kane, S. A. J. Preston, N. E. Clayton, Texas; Sidney Smith, G. L. Fisher, G. W. Field, Neb.; Sidney Osgood, L. D. Grosvenor, G. W. Lloyd, Mich.; L. H. Sullivan, C. L. Siles, Wm. Holabird, Ill.; J. W. Reed, J. F. Wing, B. Vonegut, Ind.; J. W. Yost, E. O. Fallis, S. R. Des Jardines, Ohio; J. G. Haskell, E. T. Carr, C. B. Hopkins, Kansas; E. T. Mix, D. M. Harteau, A. C. Class, Wis.; W. F. Hackney, C. H. Lee, E. H. Taylor, Iowa; F. C. Bruce, A. M. McMurphy, T. H. Morgan, Ga.; Louise Bethune, W. W. Carlin, New York; J. S. Matthews, Wy. T.; A. E. Cobby, Dakota; J. F. Cook, Cal.; C. C. Helmers, A. Van Brunt, T. B. Annan, Mo.; H. Wolters, H. P. McDonald, H. L. Rowe, Ky.; G. W. Thompson, J. F. Baumann, Tenn.; L. S. Buffington, I. Hodgson, D. W. Millard, Minn.; C. C. Helmers, St. Louis, chairman.

THE convention of builders, which assembled in Chicago, March 29, 30, 31, and formed a national association, has by this movement taken a most important step in the interest of the public as well as the building fraternity. We had feared that because of the labor agitation of the past year, that the work of the convention might be misdirected, and tend to antagonize labor; but nothing was more unanimous than the effort to show the workmen that the best efforts of the builders was toward their direct benefit. As a convention, it was one of the best organized and conducted ever assembled in Chicago. The measures considered were looking toward an insurance fund for the trades, the establishment of manual training and trade schools, the review of the lien laws in the different states, the system of contracts, etc., all of which we pointed out as proper work for the convention months ago, and are glad to see that there is such an apparent uniformity of thought upon these great questions.

THE officers elected are: President, J. Milton Blair, of Cincinnati, who made a decided impression upon the delegates, by his forcible arguments and critical handling of the different subjects which came up for debate. The secretary, Mr. W. H. Sayward, of Boston, whom the association must regard as its author, is a man of great executive ability, and possessed of a personal magnetism which makes every man a friend. The treasurer, Mr. J. J. Tucker, of New York, is one of the best known among the builders of that city. As a board of directors, one member was chosen from each city which was represented in the convention, these directors to act as delegates at large. They are twenty-three in number and are all representative men.

THE work laid out in the way of discussion was introduced in the shape of resolutions, which were submitted to a committee on resolutions, which arranged them so that they could be adopted and stand as the platform of the association. The work of this committee was well done, and the discussion which followed the committee's report showed that every delegate was not only able to think, but had given much time and study to the different problems which lie outside of the figuring of contracts, but are equally important to the success of the builder's business. The visitors were most royally entertained by the Chicago Builders and Traders' Exchange, and went home well satisfied with the convention and its results. No association ever started out with better prospects for success, and this, the most important movement ever inaugurated by builders in this country, will undoubtedly have a strong effect upon general building interests.

THE sudden collapse and fall of new buildings, especially court houses and others of a public nature, from no apparent cause but an inherent inability to stand up, has been, unfortunately, frequent in this country, and is popularly assumed to be a peculiarity of American architecture. While there should be no disposition to excuse or palliate such accidents, it may sometimes be instructive to learn that they are not wholly unknown in foreign lands. A remarkable illustration is given by the Vienna *Bau Industrie Zeitung*, the building being no other than the new court house (Justizpalast) of Brussels, Belgium, an edifice which was finished about two years ago, and was believed to be a model of solidity, able to bid defiance to the storms of centuries. An entire ceiling fell almost without warning; soon another fell, and another, while threatening cracks and fissures opened, widened, and

branched in ceilings of rooms, halls and corridors, and excited the utmost alarm for a time as to the safety of the whole building. A partial investigation showed that the ceilings in some fifty-three rooms were insecure, and it was feared that the worst had not yet developed. It is thought by experts that the whole edifice, which rests upon a chalky formation penetrated with numerous water-bearing strata, is undergoing a gradual and constant sinking, due to the escape of the subterranean water. It will be remembered that a similar result was observed in London some years ago, where the pumping operations in connection with excavations for underground railways or sewers, occasioned some alarming settlements in adjacent buildings, due to the removal of the water from underlying strata. The subject is one of great interest to architects and engineers, and is to be investigated as thoroughly as possible. The Vienna *Bau Industrie Zeitung* remarks, much as American journals are wont to do: "It is a poor recommendation for Belgian official architecture that so important a building should be in such a condition of decay before it has been occupied two years."

SEVERAL interesting articles have appeared in *La Semaine des Constructeurs*, on the use of asphalt as a cement in the foundations for heavy machinery, with a view to the diminution or entire elimination of the noise and shock produced by its operation. Since the year 1880, M. Malo, a mechanical engineer, has been experimenting with asphalt masonry, and has attained some remarkable results. In one instance a manufacturer in Paris had been threatened with damage suits by his neighbors, disturbed by the noise and jarring produced by his machinery. M. Malo was called in, rebuilt the foundations with asphalt cement, and there was no more complaint. Another case was at Lyons, France, where a steam engine of one hundred horsepower was rendered noiseless in like manner. M. Malo's method is to excavate a pit for the masonry, to spread on the bottom a layer of melted asphalt mastic, at a temperature of 200 degrees (Centigrade?) and to bed in this the footing stones. The upper courses are then constructed of uneven stones laid in asphalt, and the joints filled solid with liquid asphalt mastic used as a grouting. This cementing material is not affected by moderate changes in temperature, and has a degree of elasticity which dissipates the jarring and noise of machinery and prevents its communication to the earth beneath. After standing twelve days, the masonry is ready to receive the machinery. To prevent any heat being transmitted to the top layers of the asphalt from a steam cylinder, or other very hot piece of mechanism, M. Malo advises to cover the top of the masonry with a thick layer of hydraulic cement.

A LATE number of *La Semaine des Constructeurs*, reproduces from a photograph by Albert Levy, a view of an interior, designed by Mr. E. A. P. Newcomb, architect, of Boston, Mass., and makes it the occasion for quite extended remarks on American architecture. The following extracts will serve as samples: "If it has been said, 'Happy are the nations which have no history,' we may add, by analogy, our congratulation to those which have no architecture. In this sense the American people are blessed, for in the specimens of their work which come to our view, it is difficult to distinguish any characteristic of a style peculiar to this new nation. There is, indeed, nothing strange in the absence of architectural canons in America, since there are no traditions of a national art over there, and its designers are left to an interpretation more or less "bizarre" of the artistic echoes which reach them from Europe. More quickly even than could be expected, these 'English cousins' show a marked predilection

for whatever serves to recall the more popular architectural styles of England, of the fourteenth and fifteenth centuries, and the 'Queen Anne,' corresponding to our Louis Thirteenth. These are reproduced or suggested with varying freedom or accuracy, quite as largely in the suburbs of New York and Philadelphia, as around London or Birmingham."

THIS French journal points out in detail many features of the interior illustrated as properly characteristic of "Queen Anne," such as the paneled pier inclosing and framing the fireplace, the square, single member, blocked door casings, the low, broad, beveled mirror over the mantel (we must doubt if beveled mirrors were known in Queen Anne's day), the high, paneled wainscot, with square, uniform panels, artlessly repeated in vertical and horizontal rows, the plain, geometrically paneled ceiling, the portières hanging from an iron rod across an arched opening into the next apartment, also the somewhat stiff center table and the uncushioned, bare wooden chair which keeps it company. All these it finds a sort of harsh anachronism in the light of the gas chandelier, with its globes of opalescent glass, and in the whole arrangement it observes a sort of "primitive left-handedness," possibly so intended. But on the whole, it considers such naive and healthy originality far preferable to the excessively proper conventionalities of modern French decoration, where individuality is smothered under the excess of rules and traditions.

AN amendment to the Chicago building ordinance was passed by the council, December 20, providing that all buildings hereafter to be erected, over ninety feet high, including appendages of whatever description, shall be built throughout of incombustible material. This does not prohibit the use of wood for doors, interior finish, etc., but the flooring boards must be laid down upon substantially solid concrete and the roof boards covered with incombustible covering. Churches and elevators do not come within the provisions of the amendment. This is one of the most sensible and valuable ordinances passed in Chicago since that prohibiting the erection of frame buildings within the city limits. It remains now for the city building inspectors to see that the ordinance is rigidly enforced. It will be of immense benefit to the city as a city, as well as to individual property owners, an important factor in the future development of the western metropolis.

LA *Semaine des Constructeurs* announces the publication of a learned and important work in Paris, in the shape of a dictionary, biographical and critical, of French architects, an octavo volume of 800 pages and some 6,000 names. Some curious historico-architectural errors are noted and corrected in this work, such as the following: "It is not a little strange that until the end of the nineteenth century, people should ascribe the design of the ground floor of the grand gallery of the Louvre to Thibaut Ketezeau, although it is well known that Ketezeau first came to Paris in 1569, two whole years after this gallery was built. In like manner, Pierre Chainbige is usually considered the designer of the smaller gallery of the Louvre, and has been honored with a statue therefor, although he was but twenty years old and quite unknown to fame when this gallery was begun, and it was not till 1582, fifteen years later, that his name first appeared in official records, as one of the contractors for constructing the grand gallery." If the French find so much difficulty in keeping their architectural history in order, we may, perhaps, congratulate our busy nation that we have so little architectural antiquities of our own to perplex us and distract our much preoccupied attention.

Building Contracts.*

THE fundamental idea of a contract is the mutual agreement of the contracting parties put in writing for convenient reference in avoiding and settling disputes. If it is correctly drawn it will prevent the possibility of dispute, but if such a contingency should arise it must provide for settling the dispute without litigation. A contract for building or executing any kind of work connected with a building is supposed to be such an agreement as the owner and contractor may make with reference to determining the rights of both parties. To do this it has always been thought necessary to bring in a third party, the architect who has drawn the plans and is engaged to supervise the work, and who, while not signing the contract, is made a referee in it for certain defined purposes. It has been held by some that the architect, being thus recognized, should be a signing party also, and that his relation to the owner and contractor should be defined in it. Experience has not shown the necessity for it, and the use of an architect's name as referee and for the identification of the specifications and plans, which always form part of the contract, has generally answered the purpose in view.

The main defect, however, in contracts in which the architect is referee, has arisen from the difficulty of defining his duties as superintendent, and the failure to insert after his name, when defining such duties, the words "or his successor."

Admitting, therefore, that a building contract is sufficient if made by two parties only, and having the architect for referee for certain purposes, it is of the utmost necessity that the contracting parties agree as to the nature and extent of the referee's duties and authority.

And aside from this there are certain stipulations which it is necessary to make, because in the absence of them the common law would step in under certain contingencies which might arise in the execution of any contract, which would practically nullify its true intent and meaning, and in case either party should attempt to take advantage of it, would work to the injury of the other party.

Many architects who have prepared printed forms of contracts for their own use have not always been mindful of this, and many of these stipulations have appeared to them to be useless verbiage, and have been left out of the contracts. There are many who draw up contracts in the simplest possible form, only stating the names of the parties, nature of the work in brief, reference to plans and specification, consideration, method of payment and time for completion, leaving all other matters to be settled by the law. This is all very well if the parties are well disposed and the work goes on without alteration, interference, interruption, accident, neglect or financial shortcomings. But in either of these contingencies the general law of contracts as accepted and interpreted by the courts—and it is pretty much the same in all the states—will be most likely to settle the matter to the prejudice of both or either of the parties. There are no laws, that I am aware of, defining what is most expedient in carrying on the various works on a building so that the many contractors shall work together in harmony, and that all the rights of owner, architect and contractors shall be preserved and the work executed with economy and dispatch, so that everybody shall get all that is due him at the right time and in the right way, and forfeit what is not due to him. In some states the law defines the rights under leases so clearly that it is only necessary for the landlord to give what is called a "simple letting." In this he says that he leases such a house, such a time, to such a party, for such a sum, to be paid in such a way, and signs his name. Underneath this the lessee says he has hired such a house, such a time, from such a party, for such a sum, to be paid in such a way, and signs his name. The law will settle any dispute that may arise. But it will not do so justly in the case of a building contract. And moreover the law-makers in, I think, every state of this union have made what are called "lien laws," especially to prevent the action of the common law in such contracts, making unknown persons parties to them, and tending to complicate the whole contract system.

Now, these stipulations to which I have referred, are the numbered clauses that have always appeared in the blanks sold by law stationers all over the country, the origin of which is involved in obscurity, and they cover the ground pretty nearly. Yet strange to say very few of them have any clause referring to liens, or showing how the existence of liens is to affect the money payments.

But most of these clauses have grown out of the peculiar nature of building contracts, which are different in their purpose from all others; and yet, while tens of thousands are signed yearly throughout the country, there is so slight a difference between the contingencies likely to arise in the execution of any two contracts, that there is little or no necessity that they should ever be varied in their essential particulars.

And this brings us to a realization of the absolute absurdity of the system of contracts now prevailing, which is exactly the opposite one. The state of affairs existing today is about like this: a contractor for some particular line of business executes ten contracts in the course of a season's work. They are on ten different buildings, and there are ten different architects for them. After the jobs are awarded to him, he is asked to call and sign the contracts, which are filled out on the architect's blanks, and he is expected to sign a different form of contract in each case; and yet the materials and workmanship are the same in each building, and the conditions under which the work is to be done are very similar. One contract may have three pages of fine print, which he can hardly read without glasses, and another may have one page of coarse print; and so they may vary through all the possible changes from one to ten. In each case, it is not expected that he will demur to anything; but he is expected to sit down and affix his name. In some cases only one copy is prepared, and he is told that the architect will keep it safe, so that both parties can see it. In others it is prepared in duplicate, and he is allowed to take one of them. In others he sees that the owner's name is not affixed, and when

he asks if the owner will not sign his name, as an earnest that he has awarded and will abide by the contract, he is told that, "In this office the owner does not sign contracts, but will write his name when necessary." In some contracts the percentage to be retained is twenty per cent; in others, fifteen, and in others ten. In some, the architect is made the arbitrator in everything, and his decision as to the construction of the contract and the valuation of extras and deductions is absolute and final; in others he is the arbitrator in all things except a dispute over the value of extra work, and in that the usual arbitration by disinterested parties is provided for. In some, the time to finish is a reasonable one, in others it is an impossible one. In some he is obliged to insure his work, in others the owner agrees to insure it. But I have now exceeded my ten contracts, though I might go on to a hundred variations. I have seen a contract with heavy penalties per diem, for failure to complete within a given time, in which it is stated that alterations or additions to the design of the work shall not vitiate the contract, but that such shall be made without any allowance of extra time for doing it, and that the contractor must "increase the number of workmen" for that purpose; and further, that an inspector may be put on the work at the will of the architect and expense of the contractor. If a contractor declines to sign the form of contract presented to him, his refusal is first regarded with astonishment. The architect naturally thinks that his form, which he has taken so much pains to have printed in large (and small) type, is the quintessence of all that is technical, legal and just, and that he has guarded the interest of his client against every possible art of the quibbler and skin builder. He has improved on everything else of the kind that he has ever seen. And while the contractor may hesitate at first, he may be forgiven if he signs quickly thereafter. But if he should request the obliteration or modification of some clause, especially if it is a printed one, which denies him all right to manage his work in his own way, without detriment to any one else, it is likely to be taken as a personal insult. It is expected that if he goes to that office he must sign that contract without murmur. So he *does* sign in ninety-nine cases out of a hundred. But his business sense tells him that he has signed with a mental reservation, and with a hope that it may all be for the best. In most cases, a conscientious builder consoles himself by saying, "Those clauses don't hit me." He knows, too, that the architect is an honorable man, and is trying to do right, and showing great zeal for his client, though in a mistaken way. He is pretty sure that he will not have any occasion to put his ironclad clauses into effect, or if he has, will not have the courage, or perhaps meanness, to do so. But for all that, the contractor has put himself into the power of two men to do him a wrong. One of them he may not even know, except that he is responsible. The other may not be responsible at all. I am supposing an extreme case, and it is for illustration only. I do not say that the majority of contracts are not fairly and justly drawn up, even though they may all differ from one another. But the fault is in the variation. The fault is with *us*, because we are too considerate of the feelings of others to protest against this irregular way of making contracts. I say, gentlemen, that it is unbusiness-like, and I appeal to you as business men, assembled for the purpose of advancing your business interests and improving your business methods, to take some action that will lead to the establishment of a uniform system of contracts. If one form will not answer the purpose, two forms may be used, or three. It may be desirable to have forms for different trades, or one form for a whole building and one for a part of a building; one for constructive work, and one for applied work, such as plumbing and painting. Already the steamfitters and elevator contractors have their own forms, which are recognized—the latter at least—by the architects and owners.

I have no desire to be harsh with our brethren of the architectural profession. I believe they are trying to do right, even though every man has a form of his own. He would not have it printed if he did not think it was a little better than his neighbor's. But the mistakes of the architects, regarding them as individuals and not as a body, are twofold. And here allow me to say that I criticize them as individuals, because in this department of their business they are acting as individuals and not as a body.

In the first place, these gentlemen seem to forget what it means to have two parties to a contract. This is partly because they never heard what the contractor wants. He is considerate enough to wait until they present the contract to him for his signature. He therefore expects that it shall be fair in all its terms, and from this point of view common courtesy demands that it should be. But in many cases it is not, because it is drawn up in the interest of the owner, that is, the architect supposes that it is the interest of the owner to have it ironclad. Now, from the strictly business and legal point of view, he is right. There is an old theory that the architect is a sort of middle man or umpire to stand between the owner and contractor and see that both get their rights. This is only a theory. It is not the fact. It is not the law. It is not to the discredit of the architectural profession that it is not. The architect is the agent of the owner. The courts have so decided. He is paid by him, and only by him if he is an honest man. An architect's certificate is as good in law as a bill of exchange, a draft or a promissory note. He is, therefore, doing his duty when he is looking after the owner's interests. The contractor is doing his duty to himself by looking after his own interests. If he expects the architect to do this he is very much mistaken. It is our duty as a body to look after our own interests as contractors and material men. We suffer from our own neglect. For while the architect draws the contract in the interest of the owner he does so because the contractor does not assert his rights, until it is too late. Being allowed by both parties to do so he should consult both parties and frame it in a manner intended to be satisfactory to both of them. The contractor should agree with the architect, as the agent of the owner, as to what the contract is to be, before it is ready for signature. But to avoid the necessity of this in every instance, we, as a body of contractors, should agree with the body of architects as to what all forms of contracts should be. And that is the gist of the whole matter.

In the second place the architects, as I have said, do not act in concert. Each one is a law unto himself. He lays down the law as to the practice

* Paper read before the Convention of National Builders by P. B. Wight, of Chicago, General Manager of the Wight Fireproofing Company.

in his own office and expects everyone doing business there to comply with it. He does not think of the position in which the builder is placed, often a very embarrassing one. But the way out of this position is open and clear for him. Several years since, the American Institute of Architects, having local chapters extending from San Francisco to Boston, made an effort to unify the whole contract system. The institute acted, as it supposed, for the benefit of the whole profession, and expected that its decision would be generally adopted. It was not in the position of one architect, zealous for the interests of one owner. It took a large and liberal view of the whole subject, and I think it consulted the wishes of many contractors and builders at the time. The labors of a special committee of its Board of Trustees extend through nearly a year. It compared all the forms of contracts that could be obtained, and employed legal talent to assist in its deliberations. The result was a published form of contract, which I think has been generally accepted where presented to contractors.

If the architects would accept and use it I think there would be general satisfaction. There would, at any rate, be that unity of practice which seems so desirable. But what is most remarkable is that, while before its adoption the legal forms of the stationery were generally used, since its adoption there has been, in the west at least, a greater diversity in contracts as drawn by the architects than ever before.

I think the time has now arrived for the contractors to take some action. This is our first opportunity, and we should embrace it and make it one of the topics for consideration at this convention.

It is not my purpose now to define what a proper form of contract, which would be just to the contractor, should be; that would be matter enough for another paper. The institute form is a good starting point. But we may now decide how to go about it to come to an understanding with the other parties in interest. Heretofore the only effort to unify the contract system that has borne any fruit has been that of the American Institute of Architects, a body which, on account of its long existence, large and extended membership, and the very high standing of many of its fellows, ought to be respected, by its own members at least. But its work has not been generally accepted by the profession. I have a printed form of contract stamped as being adopted by one of the chapters of the institute (the Rhode Island chapter), which is a modification of the institute's form. This shows a divergence of opinion in one of its constituent bodies. It shows that the whole matter must be more carefully studied in order to receive a general approval.

The Western Association of Architects has also taken up this matter. At its last annual convention a committee of fourteen on "Uniform Contracts and Specifications" was appointed, and this committee proposes to report at the annual convention in October of the present year. The result may be the official adoption of still another form of contract, one to suit the ideas of the western architects.

As I have said, the architects, as the legal representatives and agents of the owners, have taken the initiative in this matter. We must not wait to be invited to confer with them, because we are the other party in all contracts. But the subject is of as much interest to us as to the architects or the owners. When a form is ever adopted which has the sanction and approval of the party of the second part as well as the party of the first part, and sanctioned by a national association of master builders and contractors, nothing can stand in the way of its general use. A form of contract, approved by representatives from the two bodies already mentioned and this association, would be more generally used by the architects individually than one adopted by themselves, for they would have some assurance that it would be acceptable to the builders. There would then be some hope for unification of practice; and should they not employ it, we would have good reason to demand its use, and would be justified in refusing to sign any other form; while now we have nothing to suggest, and are powerless to take any firm stand as individuals. It would, therefore, seem to me wise for this association to pass appropriate resolutions, which should appoint a committee to confer with the trustees of the American Institute of Architects, which is a permanent body, having all the powers of a standing committee *ad interim*, with a view to the adoption of the form of contract prepared by it, or any modification of it which may be acceptable alike to owners and contractors. Also, that the Special Committee of the Western Association of Architects on Uniform Contracts and Specifications be invited to join the conference before taking further action. Such a procedure seems to me to be necessary in view of a possible divergence of ideas between the architects of the institute and those of the Western Association, and the want of any sanction from the builders. There is no use of establishing a uniform contract system, unless we see that it is one which respects the rights of the builder, and the builders insist on its use after it is approved. What it should not be we may be free to say now. What it should be we may safely leave to a wise and discreet committee. With these suggestions I offer the following resolutions:

PREAMBLE AND RESOLUTIONS.

WHEREAS, It is desirable,

1. That all blank forms of contracts for building should be uniform throughout the United States;

2. That such forms of contract, with the conditions thereof, should be such as will give the builder, as well as the owner, the protection of his rights, such as even justice demands;

3. That whenever a proper form has been approved by this association, it is the duty of every builder and contractor to insist on its use in every case; and,

WHEREAS, In a spirit of fairness the American Institute of Architects has framed such a form of contract as has seemed to it proper, and has asked its members to use it; and,

WHEREAS, The Western Association of Architects has appointed a Committee on Uniform Contracts and Specifications to report at its next annual meeting; therefore,

Resolved, 1. That a committee of ten be appointed by the president to confer with the Board of Trustees of the American Institute of Archi-

itects, with a view to the adoption by this association of the form of contract adopted by the American Institute of Architects; or if the same should not be satisfactory to the committee, such a modification of it as would appear to them to deal justly with builders and contractors in general, as well as with the owners and architects.

2. That in case such a conference is had, the Special Committee of the Western Association of Architects on Uniform Contracts and Specifications be invited to join the same before taking further action.

3. That in case no further action is taken by the Board of Trustees of the American Institute of Architects, the special committee of the Western Association be asked to confer with this committee with the objects in view as expressed in this preamble and resolutions.

4. That the committee report such forms of contract as may be approved by the conference for adoption by this association at its next annual meeting.

National Association of Builders.

First Annual Convention of the Builders of the United States.

(COMPILED FROM THE OFFICIAL VERBATIM REPORT FURNISHED THE ASSOCIATION BY THE INLAND ARCHITECT AND NEWS RECORD.)

FIRST DAY—MORNING SESSION.

THE meeting was called to order, at 10:30 A.M., by Mr. George C. Prussing, who requested the delegates to take their seats—the different delegates together as much as possible,—and then said:

Gentlemen,—As a citizen of Chicago, and a representative of its Builders' and Traders' Exchange, I bid you welcome to our city. Welcome at all times, but thrice welcome now in your capacity of delegates to this convention. You are sent here to lay the foundation of an edifice, which, when completed, will bear witness, we trust, of the business tact, moderation and wisdom of its founders, and be of benefit to all—not only to those whom we more directly represent, the Builders, but also to the mechanics and laborers engaged in the various building trades, and in the shaping and preparation of building materials. And if such be the result of your deliberations, who will say that it is not of use and benefit to the general public as well? Everybody is, or expects to be, a builder, at some time of his life, and the results of your labors will affect all directly or indirectly, immediately or remotely. Again, gentlemen, I bid you welcome. May your stay in this city be pleasant, so that you will ever recall with pleasure the first National Convention of Builders, and Chicago. And now, gentlemen, as chairman of the Executive Committee, appointed at the preliminary conference in Boston, I call you to order for the business in hand. The nomination of officers for this convention is the first business in order. You will please nominate a chairman.

Mr. J. S. Stevens (Philadelphia): You announce the business in order to be the appointment or election of a chairman and president for this convention. Nobody knows better than myself—having been one of the committee appointed in Boston—as regards the labors that have been performed by that committee, and the valuable services that have been rendered thus far in our work by the gentleman who has been our chairman, and I think he is eminently the proper man to preside over this convention. I take pleasure in nominating Mr. George C. Prussing, of Chicago, to be permanent chairman.

Motion seconded.

Mr. Prussing was unanimously elected chairman.

PRESIDENT'S ADDRESS.

We live in an age of organization. The necessity of organizing the building trades has been felt in the larger cities for a long time, and has resulted in nearly all of them in separate trade organizations. In two notable instances these local organizations have formed national associations holding annual conventions. I refer to the National Plumbers' and Painters' Associations. After the local trade organizations had existed for some time the necessity of forming central bodies in each of the larger cities became apparent, there being many questions of common interest to be dealt with, and for the transaction of the current business of the day with one another. This resulted in the formation of Builders' Exchanges under various names and titles. The next step is naturally the establishment of a National Association of these various local exchanges under whatever name they may be known. For a year back this idea has been urged and advocated. Boston deserves the honor to be known as its birthplace, and Wm. H. Sayward as its apostle. At his request a conference of representatives of ten cities met there in January last and took the preliminary steps for this convention. You all know the tenor of resolutions there passed. Your presence in this convention is the result. You are now assembled as the first National Convention of Builders. It has never been intended to give these National Conventions legislative powers; their action must rather be advisory in its character. There are a number of questions which must be dealt with by the local organizations, but there are also a large number on which the interchange of ideas and experience by the various sections of this large country cannot help but be of the greatest benefit to all. You have met to secure uniformity of action by recommendations to local exchanges through a central body in matters affecting the interests of builders in their relations with owners, architects, mechanics, apprentices and workmen generally. And in addition to this, our prime object, it is hoped that by the social intercourse naturally incidental to gatherings of this kind, and the extended acquaintance among the builders of the different cities various and lasting benefits will be derived. Let our meetings be harmonious, our intercourse pleasant; bear with your fellow-delegates, who, coming from another portion of this great

country, accustomed perhaps to entirely different circumstances and customs, may see matters hereafter to be introduced to your notice for discussion in an entirely different light.

You will now nominate a secretary.

Mr. J. Milton Blair (Cincinnati): I move that Mr. W. H. Sayward, of Boston, be our permanent secretary.

Motion seconded.

Mr. W. H. Sayward: Gentlemen of the convention, I need not say that I thank you for giving me these arduous duties to perform, but I accept, with pleasure, and will do my best to carry out my portion of the work in the convention. I will ask Mr. J. Arthur Jacobs, of Boston, and W. Harkness, Jr., of Philadelphia, to act as my assistants.

The President: The next business in order for proper organization will be the appointment of a committee on credentials.

Mr. C. H. Reeves (Philadelphia): I move that the secretaries and nine delegates be appointed by the chairman to act as a committee on credentials. After some discussion, the original motion was carried.

The President: In pursuance of the resolution just passed I will appoint the mover of the resolution, Charles H. Reeves, of Philadelphia, Mr. J. F. Adams, of Baltimore [Mr. Adams not being present, Mr. Philip Walsh, Jr., of Baltimore, was appointed in his stead]; Mr. Ira G. Hersey, of Boston; Mr. Isaac Graveson, of Cincinnati; W. J. Stapleton, of Detroit; John Burns, of New York; G. J. Grant, of St. Paul; J. B. Sullivan, of Chicago, and A. J. Muir, of New Orleans. The gentleman from Chicago, whom I selected, not being present, I will appoint in his place a second gentleman from St. Louis, John R. Ahern. This committee will hold its session upon adjournment of this convention, and each delegation is requested, through its chairman, to hand in their credentials and copies of the constitution and by-laws of their local organization and the initiation fee to the national association of those who have not already paid it, the secretary being authorized to receive the moneys. The secretary requests me to state that it will be necessary for every delegation, whether they have originally filled out their report or not, to present their credentials to the secretary now, so that an authoritative roll of members can be made out and printed, and should be in the printer's hands as soon as possible. The committee will be in session right here. Is there any other business before this convention before adjournment?

A delegate: I move, Mr. Chairman, that we take a recess until 2 o'clock this afternoon. (Adjourned.)

FIRST DAY—AFTERNOON SESSION.

The president called the meeting to order at 2:40 P.M., and said: The first business before the house is the report of the Committee on Credentials.

The secretary read the following report:

CHICAGO, March 29, 1887.

To the Chairman, Officers and Members of the First National Convention of Builders:

GENTLEMEN,—Your Committee on Credentials beg leave to offer the following report, and present the following list as the duly authorized delegates to this convention, viz.:

CLEVELAND, OHIO: Thos. Simmons, H. Kickheim, John T. Watterson, S. W. Watterson.

MILWAUKEE, WIS.: Thos. Mason, Garrett Dunck, John Laugenberger, Richard Smith.

CHARLESTON, S. C.: D. A. J. Sullivan, Henry Oliver.

NASHVILLE, TENN.: Daniel S. Wright.

DETROIT, MICH.: Thos. Fairbairn, W. E. Avery, W. J. Stapleton, Jas. Roche, W. G. Vinton.

MINNEAPOLIS, MINN.: Thos. Downs, F. B. Long, H. N. Leighton, Geo. W. Libby, Herbert Chalker, F. S. Morton.

BALTIMORE, MD.: John Trainor, John J. Purcell, Geo. W. Hetzell, Wm. H. Anderson, Wm. Ferguson, Philip Walsh, George Mann.

CHICAGO, ILL.: Geo. Tapper, P. B. Wight, Geo. C. Prussing, W. E. Frost, F. V. Gindele, A. W. Murray, J. B. Sullivan.

ST. PAUL, MINN.: Edward E. Scribner, J. B. Chapman, E. F. Osbourne, G. J. Grant, J. H. Donahue, J. S. Burris, J. W. Gregg.

BUFFALO, N. Y.: Chas. Berrick, John Feist, Chas. A. Rupp.

CINCINNATI, OHIO: J. Milton Blair, L. H. McCammon, I. Graveson, Jas. Allison, H. L. Thornton, J. C. Harwood, Wm. Schuberth, Jr.

PHILADELPHIA, Pa.: John S. Stevens, Chas. H. Reeves, D. A. Woelpper, Geo. Watson, Wm. Harkness, Jr., Geo. W. Roydhouse, Wm. Gray.

COLUMBUS, OHIO: Geo. B. Parmelee.

ST. LOUIS, MO.: Andrew Kerr, H. C. Lindsley, Jno. R. Ahrens, John H. Dunlap, Anton Wind, Richard Walsh, Wm. Gahl.

INDIANAPOLIS, IND.: John Martin, J. C. Adams, Fred Mack, G. Weaver, C. Bender, Wm. P. Jungclaus, Peter Rautier.

NEW ORLEANS, LA.: A. J. Muir, H. Hofield, F. H. West.

BOSTON, MASS.: Leander Greely, Ira G. Hersey, John A. Emery, Wm. Lumb, J. Arthur Jacobs, Francis Hayden, Wm. H. Sayward.

NEW YORK CITY: A. J. Campbell, A. G. Bogert, John Byrns, John McGlensey, Marc Eidlitz, John J. Tucker.

TROY, N. Y.: C. A. Meeker.

ALBANY, N. Y.: David M. Alexander.

WORCESTER, MASS.: E. B. Crane, O. W. Norcross, Henry Mellen, O. S. Kendall, Robt. S. Griffin, Geo. H. Cutting.

GRAND RAPIDS, MICH.: John Rawson, James Curtis, H. E. Doren, J. D. Boland, C. H. Pelton, W. C. Weatherly, C. A. Sathren.

SIoux CITY, IOWA: Fred F. Beck.

PITTSBURGH AND ALLEGHENY CITY, PA.: Geo. A. Cochran, Saml. Francis, Alex. Hall, R. C. Miller, Geo. S. Fulmer.

PROVIDENCE, R. I.: Geo. R. Phillips, Richard Hayward, Geo. S. Ross.

ROCHESTER, N. Y.: Chas. W. Voshell.

WASHINGTON, D. C.: Thos. J. King.

Your committee also recommend that alternates be entitled to seats in the convention, but to have no voice or vote except in the absence of a delegate. Respectfully,

WM. H. SAYWARD, *Chairman for Committee.*

Mr. A. W. Murray (Chicago): I move that the report of the committee be received, approved and adopted. The report was unanimously accepted.

The President: I hereby declare the names, as read, delegates, and entitled to seats in this convention.

Mr. Stevens (Philadelphia): I would move, sir, that a committee of five be appointed on constitution and by-laws.

Mr. Campbell (New York): I suggest that there be a committee on preamble, constitution and by-laws.

The President: The motion now stands that a committee of five be appointed on a preamble, constitution and by-laws. (Carried.)

Mr. George Watson (Philadelphia): I move that a committee be appointed to name the time and place of holding our next convention, and nominating officers therefor, after the committee on by-laws and constitution make their report.

The President: The first business in order, gentlemen, is the appointing of a committee of five on constitution and by-laws. I will appoint:

John S. Stevens, Philadelphia; Edward E. Scribner, St. Paul; J. Milton Blair, Cincinnati; W. P. Jungclaus, Indianapolis; John Byrns, New York.

Mr. Campbell: I now renew my motion to add the secretary and president to that committee. (Carried.)

Mr. Watson: I renew my motion that a committee be appointed to name the time, and nominate officers for the next convention, after the Committee on Constitution and By-Laws have reported. (Carried.)

The President: I will appoint on that committee George Watson, Philadelphia; Marc Eidlitz, New York; C. B. Crane, Worcester, Mass.; J. C. Harwood, Cincinnati, and John Trainor, Baltimore.

The Secretary: I move that a committee of five be appointed by the chair to act as a committee on resolutions; that all resolutions offered in this convention be read once and then referred without discussion to this committee, to be by them prepared collectively for presentation to the convention for adoption. (Carried.)

The President: How shall that committee be appointed?

A delegate: By the chair.

The President: On this committee I will appoint Messrs. W. H. Sayward, of Boston, John J. Tucker, of New York, William Harkness, Jr., of Philadelphia, James Allison, of Cincinnati, and Geo. B. Parmelee, of Columbus, Ohio.

The President: If there are any present who have resolutions prepared for the action of this convention, it is now the time to offer them. Upon offering resolutions, such remarks as the mover may have to make will be listened to, but no debate indulged in until they have been reported back from the committee.

Mr. Harkness, of Philadelphia, read a resolution referring to manual training and trade night schools.

Mr. Eidlitz, of New York, read a resolution providing for life and accident insurance.

W. H. Sayward, of Boston, offered a resolution.

These resolutions were all referred to the Committee on Resolutions.

Mr. Campbell: Preparatory to what I have to offer, I wish to say a word or two. This being the first step toward what we hope to be a decided and progressive movement, it is well that we should guard our steps so that no misunderstanding or misrepresentations may be made by those who do not approve of our action. It is proper that we should stand before the world in a light that we can bear, and that we shall not be misrepresented by any shortcomings of our own; and with a view to that course we have, coming from the New York delegation, a form of preamble to the resolutions that may be adopted, which we wish to submit for the consideration of this committee. They were then read by the secretary.

PREAMBLE.

1. The interests of labor and capital are mutual, and should not, by any undue measures, theories or influences, be antagonized.

2. With good will, unity of purpose, reasonable forbearance and full recognition of the just rights of every individual, success in business and the happiness of the social and family circle can be largely enhanced, if not wholly secured.

3. It is not right, nor just, for one class of mechanics or laborers, skilled workmen or employers to endeavor by threats or dictation to encroach upon or nullify the vested rights of another class, or any part thereof, nor of individuals.

4. It is the duty and province of each class of producers within the great human family to employ its surest means and best efforts to ameliorate the condition of its individual members, endeavoring thereby to secure the best results and greatest good for the greatest number.

5. Appeals to common sense, by conference and arbitration, upon all subjects of difference between contending parties holding conflicting ideas, with a view to avoid damaging consequences and disastrous results, should be the course pursued before heroic measures are adopted to cure evils complained of, real or imaginary.

6. In view of the foregoing expressed ethics and sentiments, we, the employing mechanics and tradesmen engaged in the building business throughout the nation, deem it our duty to organize for the purpose of sustaining the following code of principles:

1. Law and order, defending liberty and the just rights of every individual in the earnest and honest pursuit of his vocation, be he employer or workman.

2. To pursue the same principle that all men are free to select their own vocations in life, and to brood the same unmolested and without hindrance; and to dispose of their energies, skill and fruits of their toil, to whom, and at such prices as themselves, individually, may determine.

3. Protection to the combined and united interest of labor and capital alike, as being each dependent upon the other, and neither one subservient to the other.

4. All lawful and just measures which have in view the fundamental principle of harmonizing capital and labor; appealing to reason before force is employed; opposition to the direful and disastrous practices on the part of workmen, in recent years, which have so much disturbed and obstructed the building business and the currents of trade and commerce generally, tending thereby to destroy confidence; impoverish the working classes repeatedly, and impair the prosperity of business generally.

5. All healthful plans and propositions having in view the education of all concerned and interested in our several callings, by teaching and learning the one great principle of *justice to all*, in all cases, under all circumstances; and that all peremptory acts, arbitrary rules, despotic and unlawful powers, combined and abhorrent means and forces, exercised by organization, or individuals, with the object of obstructing the progress of business, and depriving workmen of their rights to labor, and to a proper and just reward therefor, or interfering with the rights of capital in its legitimate employments for the benefit of its owners, are reprehensible in the extreme, and should be frowned down by every law-abiding and order-loving American citizen, at all times.

6. The encouragement and promulgation of a well devised plan calculated to unseat, and, if possible, destroy the unfortunate hostile feelings at times existing between employers and employes, labor and capital, bringing them together by the union of forces from the ranks of workmen, and of employers, through conventions and committees to disseminate knowledge and information, give lawful and reasonable submission to just and deliberate decisions; so that each man may reap the reward of his merits in industry and skill, and that not any, be they sluggards or drones, may prey or fatten upon the fruits and labors of the honest, industrious men of work.

Unanimously approved by the delegates from New York City for presentation.
A. J. CAMPBELL.

The preamble was referred to the Committee on Resolutions.
The session adjourned.

SECOND DAY—MORNING SESSION.

President Geo. C. Prussing called the meeting to order at ten o'clock, and said: Before proceeding with the regular business of this convention, I wish to announce that the secretary of the Builders' and Traders' Exchange will circulate among you, and present each of the delegates with a little button, which we request you to wear while in this convention, and take home with you as a souvenir of the first Builders' Convention, Chicago.

The President: The following dispatch has been placed in my hands. Before reading it, I wish to explain that Washington City, although represented at the first conference in Boston, was not represented on the floor of this convention yesterday, Mr. King being traveling at the time. He received this dispatch and presented it here this morning:

Thomas J. King, Grand Pacific Hotel:

You are authorized to represent the Master Builders' Association of this city, in the National Convention.

Attested, J. D. J. MCCARTHY, *President.*
Wm. P. _____, *Secretary.*

A delegate: I move it be received, and that Mr. King be received as a delegate, and his name entered on the roll. Unanimously carried.

The secretary then called the roll, there being 107 delegates present and 10 absent.

The President: We will now proceed with the regular business. The first in order is the report of the Committee on Preamble, Constitution and By-Laws, Mr. J. S. Stevens, of Philadelphia, chairman.

Mr. Stevens: Mr. Chairman, and gentlemen of the convention: Your Committee on Preamble, Constitution and Rules of Order, have prepared their report. They have omitted preparing anything in the shape of a preamble, for the reason that the sum and substance of the objects of our organization are comprised in one of the articles we have prepared in the constitution: Secondly, that inasmuch as yesterday there were placed in the hands of the committee on resolutions, by Mr. Campbell, of New York, a Preamble and Code of Principles, and inasmuch as there have been other resolutions, and probably will be still more presented to their committee, from which they will compile and present here what we might term a platform, we thought it would be better to have that all embodied in one preamble and set of resolutions, rather than to hamper a document of this kind with a great deal of useless verbiage. Your committee have endeavored to boil this matter down, to get right down to bottom facts. Our object has been to use plain terms in order that "he who runs may read." With your permission, Mr. Chairman, I will read the result of our labor. My suggestion would be, gentlemen, that you will kindly refrain from criticising any one article, even in your own minds, until you have heard the entire paper read.

Mr. Stevens then read the report of the committee.

Mr. Campbell: I move the adoption of the Constitution and Rules of Order as presented by the committee.

Mr. King (Washington): I offer as an amendment that the report of the Committee on Constitution and By-Laws, as read, be adopted by sections.

Mr. Campbell: I will accept the amendment.

The President: If it is the unanimous consent of the house, Mr. Campbell desires to withdraw his original motion and accept the amendment. There being no objection, it has been moved and seconded that the report be read section by section, discussed and adopted seriatim.

The motion of Mr. Campbell, with the amendment of Mr. King, was carried.

Mr. Campbell: For the purpose of facilitating the business, as I apprehend there will be very little suggested by way of amendment, as the document appears to be particularly clear and lucid, I would suggest that the secretary read section after section, without further motion, unless some member may observe some point upon which he would like to have discussion, or upon which he would like to make an amendment, and upon such a separate motion can be made.

The President: That will be taken as the sense of the house.

The report was discussed section by section with very little change from the original reading, and the following is the constitution as finally revised and adopted.

CONSTITUTION.

ARTICLE I.—NAME.

This association shall be known as THE NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.

ARTICLE II.

The fundamental objects of this association shall be to foster and protect the interests of contractors, manual workmen, and all others concerned in the erection and construction of buildings; to promote mechanical and industrial interests; to acquire, preserve and disseminate valuable information connected with the building trades; to devise and suggest plans for the preservation of mechanical skill through a more complete and practical apprenticeship system, and to establish uniformity and harmony of action among builders throughout the country. The better to accomplish these objects, this association shall encourage the establishment of builders'

exchanges in every city or town of importance throughout the country, and shall aid them to organize upon some general system that will not conflict with local customs and interests, in order that through these filial associations the resolutions and recommendations of this National Association may be promulgated and adopted in all localities.

ARTICLE III.—MEMBERSHIP.

Membership in this association shall be established on the basis of associations or exchanges, as follows:

Properly incorporated or duly organized builders' exchanges, representing collectively employers in the various trades concerned in the erection, construction and completion of buildings, shall be entitled to membership in this association upon application, and acceptance by the board of directors.

Not more than one exchange in any city or town shall be admitted to membership. Individual members of exchanges thus affiliated shall be considered members *de facto* of the National Association.

ARTICLE IV.—OFFICERS AND DIRECTORS.

The management of the affairs of this association shall be vested in a president, two vice-presidents, a secretary, a treasurer, and one member at large from each city represented, who shall be named by the delegation from said city, who, together, shall constitute a board of directors. These officers and directors shall be elected at the annual convention, and at such election they must receive a majority of the votes cast.

They shall enter upon their duties immediately upon the adjournment of the convention at which they are elected.

They shall have authority to fill any vacancies that may occur in their numbers.

The secretary shall be paid a salary for his services, to be fixed by the board of directors, and must be able to give sufficient time to the association to efficiently carry out its purposes.

ARTICLE V.—DUTIES OF BOARD OF DIRECTORS.

The president, vice-presidents, secretary and treasurer shall constitute an executive committee, and as such shall see that all orders of the association and board of directors are carried out. They shall have direct charge of the detail work of the association.

The president shall preside at all meetings or conventions, shall act as chairman of board of directors, shall appoint committees, not otherwise ordered, approve all bills for payment by the treasurer and attend to all duties usually incumbent on the office.

One of the vice-presidents shall act in absence of the president.

The secretary shall keep record of all meetings, collect all fees and dues, paying over the same to the treasurer. He shall act as secretary of the board of directors, and render such service as may be proper for the good of the association, under the direction of the board.

The treasurer shall receive all moneys from the hands of the secretary, giving his receipt therefor, and shall pay bills of the association from the funds in his possession upon approval by the president.

The president shall appoint the following committees from the board of directors, viz.:

A legislative committee of three.

A committee on statistics, of three.

A committee on resolutions, of three.

An auditing committee, of two.

And their duties shall be as follows:

The legislative committee shall observe, investigate, and report to the board of directors, upon any proposed action by legislative bodies that may affect the interests of builders.

They shall prepare such forms of legislation as they may deem wise for the best interests of the building trades, and present them either to the board or the association for action.

The committee on statistics shall formulate plans for the securing of statistics of importance to the building trade, arrange for their dissemination, and report the same to the directors.

The committee on resolutions shall have charge of the preparation of resolutions to be offered at conventions, and all resolutions sent in by members at large shall be submitted to this committee, for revision, before being offered to conventions for action.

The auditing committee shall examine the accounts of the treasurer and report at the annual convention.

ARTICLE VI.—CONVENTIONS.

Annual conventions shall be held at such time and place as may be decided at the preceding convention.

Other conventions may be held if considered necessary by the board of directors.

ARTICLE VII.—REPRESENTATION AT CONVENTIONS.

Each Exchange affiliated with this association shall, at annual or other conventions, be entitled to representation, as follows:

One delegate at large, who shall be the director chosen at the preceding convention, and one delegate in addition for each fifty members or fractional part thereof.

Each delegate shall have one vote, and may be represented by alternate or proxy.

No delegate shall hold more than one proxy.

ARTICLE VIII.—ADMISSION FEE.

Every Exchange gaining membership in this association shall pay an admission fee of fifteen dollars (\$15).

ARTICLE IX.—ANNUAL DUES.

The annual dues for the ensuing year shall be assessed by each convention, upon recommendation of the board of directors. It shall be assessed per capita of membership in exchanges that have gained membership in this association or organization, and be payable through the officers of the exchanges or organization. This assessment will be due and payable at the annual convention, and must be paid within thirty (30) days next ensuing. Default in payment of assessment shall forfeit membership and representation.

This Constitution and Order of Business may be amended by a two-thirds vote of all the delegates present, and voting at any annual convention, previous notice of such amendment having been mailed by the secretary not less than sixty days prior to said annual convention, to each Exchange affiliated with this association.

ORDER OF BUSINESS AT CONVENTIONS.

1. Calling to order by the president.
2. Appointment of committee on credentials.
3. Recess.
4. Report of committee on credentials.
5. Roll call.
6. Reading of minutes.
7. Reading of resolutions and communications.
8. Appointment of committee to report time and place for next convention, and to nominate officers.
9. Reports of standing committees.
10. Reports of retiring officers.
11. Reports of special committees.
12. Election of officers.
13. Naming of and election of directors.
14. Unfinished business.
15. New business.
16. Adjournment.

Respectfully submitted,

WM. P. JUNGCLAUS,

JOHN BYRNS,

GEO. C. PRUSSING,

CHICAGO, March 30, 1887.

JOHN S. STEVENS,

EDWARD E. SCRIBNER,

J. MILTON BLAIR.

On motion of Mr. Phillips, the constitution, as a whole, was adopted unanimously.

The secretary then read the rules of order, which were unanimously adopted.

Mr. Purcell (Baltimore): I move that a vote of thanks, by this Convention, be tendered to the Committee on Constitution and Order of Business.

The vote was unanimous.

The President: There has been placed in my hands the following:

Geo. C. Prussing, Esq., President. CINCINNATI, O., March 29, 1887.
DEAR SIR,—On behalf of the National Association of Master Plumbers of the United States, I extend to you congratulatory greetings, with cordial and best wishes for success. Hoping that your deliberations may be tempered with prudence, and that wise counsels will prevail, I remain, Fraternal yours,
JAMES ALLISON, President
National Plumbers' Association.

On motion of Mr. John McGlensy, of New York, the dispatch was voted, received and placed on file.

The President: The next business in order is the report of a special committee, appointed yesterday, to select a place for holding the next convention. On motion, the committee report was received.

E. E. Scribner (St. Paul): I would amend to make it the first Tuesday in January of 1888.

Jas. Allison (Cincinnati): I hope this motion will prevail. If the convention is to be in Cincinnati in 1888, as one of the managers of Cincinnati's one hundredth celebration, I bid you a hearty welcome.

On motion, it was decided to postpone further discussion on the subject until after recess.

Delegate St. Paul: St. Paul wishes me to invite the delegations in January, 1888, in the city of St. Paul.

Daniel S. Wright (Nashville, Tenn.): I was unanimously instructed by the Master Builders' Exchange, of Nashville, to extend to you a hearty invitation to come down there this time, but as you have almost decided in another direction, I extend an invitation to come there next time.

Mr. Stevens: Philadelphia has something to say, may be not this time, but the next.

Mr. Trainor (Baltimore): The Maryland delegation came to this convention with one instruction, and that instruction was to use all its influence to get the next convention held in Baltimore.

Mr. Tucker (New York): I wish to say that there is a place there (N. Y.) between two rivers that might accommodate this convention, and that would be the proper place to hold it.

Ira G. Hersey (Boston): It seems to me that if we have our convention in 1888 that some place will want us this year. I hope so.

Adjourned until 2:30 P.M.

SECOND DAY—AFTERNOON SESSION.

The chair called the meeting to order at 3 P.M., and said: In the name of the Builders' and Traders' Exchange of Chicago, I now extend to you a formal invitation to partake of our annual banquet, to be spread tomorrow evening at seven o'clock, in the main dining room of this hotel. There will be an informal reception from six to seven in one of the anterooms, and by seven o'clock we will be ready to sit down at the table. (Applause.) Before we return to the regular order of business, Mr. Scribner, of St. Paul, has something to say to you.

E. E. Scribner: Such of our number as were present at the preliminary conference in Boston will remember that the delegate from St. Paul endeavored to persuade those in attendance upon the conference that the better place for holding this, the next convention, would be St. Paul. Having failed, however, lamentably, largely, I think, because Chicago always gets to the front whenever she undertakes anything, and, possibly, also, because she has five or six delegates, while the St. Paul man was alone, and very modest, as you know. Having failed in securing this convention, some of our friends suggested as a compromise that the delegates, either before or immediately after this convention, would favor the people of St. Paul by making them a visit. Quite a number of our delegates to Boston, and a number of those who are now here, I am happy to say, have signified their willingness. I presume you have all been furnished with a formal invitation today; at all events you are all invited here now to go with us at three o'clock Friday afternoon. A special car will be provided if enough signify their willingness to go. We will arrive in St. Paul Saturday morning in time for breakfast. We will try and make it pleasant during the day and evening. On Sunday, if it be necessary that we should do so, you can leave there at noon and get back here Monday morning. The cost of the whole trip, it has been estimated, will be about \$25. Our secretary, Mr. Hansen, will be happy to furnish you with tickets at reduced rates, which have been secured for the occasion. (Applause.)

The Chair: We will now proceed with the regular order of business. Is the committee upon place of the next annual convention and officers ready to report?

The committee on place of meeting, and officers, made the following report:

Your committee will report and would recommend holding the next convention in the city of Cincinnati on the first Tuesday of February, 1888, and would nominate J. Milton Blair, of Cincinnati, president; John S. Stevens, of Philadelphia, first vice-president; E. E. Scribner, of St. Paul, second vice-president; W. H. Sayward, of Boston, secretary; John J. Tucker, of New York, treasurer.

Signed on behalf of the committee,

GEO. WATSON, Chairman.

Mr. Allison (Cincinnati): On behalf of the delegation from Cincinnati, and as a representative of the Builders' Exchange of that city, I return thanks to the committee and the convention for selecting our city as the next place for the convention.

On motion, the report of the committee was received and adopted.

Mr. Stapleton: I move that the officers selected by this committee be elected by acclamation.

Mr. Harkness: Would it not be proper to go into the election for president alone, and vice-president and secretary separately? It was so agreed.

A delegate: I move that J. Milton Blair be elected president of the association for the ensuing year.

The Chair: I wish to impress on the gentlemen the necessity of having the president of and in the city where the next convention is to be held. I will guarantee that Mr. J. M. Blair will serve you as well as I have done, at least.

Mr. Blair was unanimously elected president for the ensuing year.

J. M. Blair: It is not my intention to take the time of this convention; but after the compliment passed upon me by your worthy president, it seems to me my bounden duty to make at least one sentence or two of a speech. Mr. President, I thank you for the compliment you have extended to me personally, in saying that I will make as good a presiding officer as yourself. We all know, gentlemen—and let me take this occasion to remark, that I do not know of an organization, nor a convention, of which I have been a member, where I have seen a better presiding officer than Mr. Prussing. If it is possible for me to be the one hundredth portion as good a presiding officer as Mr. Prussing, I will feel I have performed my duty properly. Again, gentlemen, I thank you, and in this connection will reiterate what Mr. Allison, of our delegation has said, and thank you again, on the part of the citizens of Cincinnati, and especially of the building fraternity, in selecting the Queen City of the West as your meeting place.

The Chair: The next business in order is the election of a vice-president.

J. S. Stevens, Philadelphia, was unanimously elected.

Mr. Stevens: *Mr. President and Gentlemen of the Convention.*—The well-known modesty of our Quaker City, the city of brotherly love, and as some of my friends have added, now, of sisterly affection, from which I have come, I feel that you have honored our city and not the individual so much, because I feel myself really unworthy of the honor which you have conferred. In regard to the object that we have had in view in the organization of this national association of builders, I wish to say a word. Heretofore, gentlemen, we have all felt that the mechanic of our country has not received at the hands of the citizens at large, the recognition that he

deserved. We feel that it is high time that the people should know who we are, and what we are, and what we are doing. When I was invited from Philadelphia by our friends in Boston, to attend the preliminary conference, and expecting that I might be asked to say something in regard to the city from which I had been sent, I made it my business to ascertain by an examination of some statistics, what we were doing in the city of Philadelphia. It was something of this kind: By examination of the census of 1880, I found out this fact, which was really startling to myself, because it was a subject that I had not given much thought to, and it may be of interest to you. If you will bear with me, I will read it. I found that in 1880, according to these statistics, which are official, that there was in Philadelphia 146,412 dwelling houses; that they had an average of 5-79-100 persons to the dwelling. In New Orleans, they had 36,347; a percentage of 5.95 persons. In Baltimore, 50,833; a percentage of 6.54. In San Francisco, 34,110; a percentage of 6.86. St. Louis, 43,026; a percentage of 8.15. Chicago, 61,069; percentage of 8.24. Boston, 48,944; percentage of 8.26. Brooklyn, 62,233; percentage of 9.11. Cincinnati, 28,017; percentage of 9.11. New York, 73,684; percentage of 16.37. Now that is a matter of interest. Then I went to our building inspectors, to ascertain what had been done in that line for the last six years. I found by an examination of our records there, that there had been 38,084 building operations. 24,672 of these were dwellings, which, added to the previous number, make a total at the first of the year of 171,084 dwellings in Philadelphia. I then inquired of our building inspectors as to the value of these building operations. I learned there that each one of these comprised a single operation. A large store that we had built there, that had cost \$300,000, was a single operation. Our churches, our factories, and our storehouses were all single operations and so down to the home of the mechanic, costing possibly \$1,000. And I have thought \$6,000 for each operation would be a fair average. But the figure startled me, and I said, "No, I cannot go away from here with a statement of that kind; I will base it at \$5,000." Well, now, \$5,000 for each of these operations, makes a sum of over \$30,000,000, that is received and expended by the mechanics of Philadelphia. Gentlemen, if we expend \$30,000,000 in Philadelphia, what is spent in New York, Boston, Chicago—all over this great country? Gentlemen, \$750,000,000 would be a low estimate as to the amount of money that is expended by the mechanics who are represented here in the convention at this time. Think of it! A sum of money that will exceed the amount that is expended in many of our commercial exchanges or boards of trade. And we want, gentlemen, that the public should know this. We want them to respect us, and we want to respect ourselves.

If these few words will make any of you go home from here feeling that you can lift yourselves up in your manhood, and that when you stand alongside of a professional man, or a storekeeper, or a merchant, that you are part and parcel of the interests of this country, that exceed in magnitude that which he represents, it will give you that much more self-respect, and you will receive in accordance as you consider of yourselves. So much, gentlemen, for the business that we do. Now, I ask you, let not our own dignity and our own self-respect—should it not be commensurate with the business that we do—men that represent the handling and the distribution of this large amount of money, should take their proper positions before the public. It is with a view to that that we propose that we shall organize in these different cities, such exchanges as have been spoken of. You know, gentlemen, the old adage—and it is a true one—that "in union there is strength;" one individual in a city can accomplish but little, but if they are all united in one common cause, success is likely to attend their efforts, and it is for this kind of union that we meet. The question has been asked by some timid people, "What is going to be your attitude toward the workingman; do you propose to array yourselves in antagonism toward the employés?" I say, "No, most emphatically no." (Applause.) We want to appeal to the great mass of workingmen, the conservative element of the working classes, who today are led and ruled by a few demagogues in their own branches of business, and we want to teach them that we, the employers, are their friends and not their enemies. To illustrate that, I will simply say, that in the city of New York, I am informed, that they have a Bricklayers' Association, composed of nineteen hundred members, and the average attendance at their meetings for the past year has been less than one hundred. Those one hundred men, the agitators, came there and made laws for the control of the nineteen hundred. Gentlemen, we want to reach the hearts and the sympathies of the eighteen hundred that do not go there, and let them assert their power to sit down upon the one hundred agitators and acknowledge that we are their friends, and that their interests and ours are identical. (Applause.) I have been asked, "What further do you expect to accomplish by these exchanges?" May I map out to you just briefly the plans that have been revolving in my own mind, and in the minds of the directors of our own exchange in Philadelphia, where an infant institution was incorporated in the year 1887—so you know we cannot be very old—and we are now voting for an exchange which we expect to open with proper ceremonies on April the 7th in Philadelphia. We intend to have there with us probably five or six hundreds of the citizens of Philadelphia, the architects and builders, etc. After that is done, it is proposed that we shall send an invitation to the different trade organizations, asking them to send a committee of three or five as the case may be, to meet us at our exchange, when our board of directors will endeavor to show and explain to them the object of our exchange, and try then and there to inaugurate a movement that shall prevent in the future any strikes; to try and teach them, if we can by moral suasion, that if they have any wrongs, that they should come to us as a brother man would go to another and say "Let us confer together on the subject." That is what we want to get at in that line. Next, we propose that we shall divide ourselves into committees; we have in our board probably ten trades represented; two from each will get together and they will adopt each one, with his colleagues in the same branch of business, a form of specifications that shall be brief and intelligible to himself and to the rest of them. We then propose to call a committee of the chapter of architects, and submit it to them that they and us may agree, and thus

establish something that we have not had in Philadelphia—uniformity in specifications. We shall ask for a certain detail that we shall want previous to making an estimate, so that we will make no mistakes.

Then we have a little scheme in our minds of this kind: We charge \$200 as membership fees for the corporate members, and we limit them to one hundred, which makes a fund of \$20,000. We limit our incorporated members to two hundred. They, with the corporate members, each of them pay \$50 per year for the use of our exchange rooms, which are intended to be a down-town office, where a man that lives in a remote part of the city can receive his mail and transact his business. Before the expiration of the year, we expect to put up a building that shall have possibly on the first floor, the Master Builders' Exchange National Bank; in the second, the rooms of the association; adjoining it, a permanent exhibition, as you have here in Chicago. In the upper floors the architects' offices; while on the top of the building (possibly the twelfth, thirteenth, or fourteenth story) with fast running elevators, we hope to have a dining room attached, so that a man can come down to that bank, deposit his money (and he will have lots of it), and then he can go up in the exchange and attend to the business there; up to the architects' office and make another contract, and then up and get his dinner, and down off to his business, and all in a couple of hours. Brethren, all go home and do likewise. (Continued applause.) I forgot to say that I thank you for electing me as first vice-president. (Laughter.)

Mr. E. E. Scribner, of St. Paul, was then unanimously elected second vice-president, and spoke as follows:

Mr. President and Gentlemen of the Convention,—Perhaps I should be all right, gentlemen, but for the natural embarrassment under which I labor, on receiving the unexpected honor (I believe it is customary to state that all honors received are unexpected), and from the further fact that I accepted today an invitation to dine with the delegation from New York, and from our worthy president, it can only be expected that I am too full for utterance. I hardly think it best to take up your time; you have important business before you. I will simply thank you for the honor conferred upon the Northwest through its delegate. (Applause.)

Mr. W. H. Sayward was then unanimously elected secretary.

Mr. W. H. Sayward: *Mr. President, and Gentlemen*,—If, after the conference in Boston, it had been decided to have elected or chosen for the position of secretary, another man than myself to try and get this meeting to come here for the first time, in order that a national association might be formed, I possibly should have felt a little hurt; for I have indeed devoted a great deal of my time for the last year to the study of this question, and to bring about this result; and now that it has been reached, it is not my modesty which makes me say that I would be very glad, indeed, if some other man could be found to take upon himself the arduous duties of secretary. But I really mean what I say, and there are probably many men right here in this room, who could fill the position a great deal better than I can myself. I thank you most heartily, and I will endeavor to do my part faithfully. (Applause.)

Mr. John J. Tucker, of New York, was then unanimously elected treasurer, and spoke as follows:

Mr. President and Gentlemen,—I have the honor to give the only negative vote to this election, which has brought me to this platform. If I consulted my own feelings I would go further, and decline the proffered position to which you have so unanimously elected me; but in view of the objects that we are here convened to establish throughout this broad land of ours, it does not permit me to raise an objection to even taking the modest position of treasurer. My heart has been so full of the great needs of an association of this character for so many years, that I am ready to devote a little more of my fast passing time to the furtherance and benefits that may be derived from a body of this character. For twenty odd years past, it has been my wish that an association, embracing what now has been so clearly set forth as being the principal object of this convention be incorporated. I had the privilege, and the great pleasure of being at the conference that first called us together in Boston, out of which this convention grew. A few years past we, in New York, were in a very demoralized condition in regard to the organization of our various bodies of mechanical employers. I can see the plan of forming an association of master builders. We have now in New York a very effective association of that order. It has been said here that the unions are assuming numbers and not strength, and that a small percentage of the whole regulates or governs the mass of the body. That is true to some extent, but further than that, these members who do not give attention to the meetings are men engaged in their daily pursuits, and allow the work done there to be done by a few that are willing to do it. In our efforts for the better promotion of the interests of all, we have established an arbitration through a conference held with our men, and by that arbitration we cover all excuses that may arise in the prosecution of our work. For two or three years past that process has been going on, and has worked very satisfactorily to both sides. We have monthly meetings at which the members on the other side meet with us, and any dispute that may arise during the progress of our employment is brought there for adjudication, and in every case that has arisen so far, they have been met and adjusted without any difficulty on either side, and perfect harmony exists. I look upon the very fact of our coming now to this national convention as being the commencement of a spirit of unity, that is likely to pervade our land, and that the success of the movement will grow; and from it, I think, you will find that the difficulty of our mechanics will be very much improved through the incentive that will be given from this body. And I hope in a very short time we will succeed in restoring the character of these workingmen to what they once were. The apathy that has prevailed in the minds of our employers throughout the land has been truly wonderful. There are many improvements in our processes of building that by the contact of this gathering we will learn to remedy, and show to the world that the builders engaged in the pursuit of erecting homes for ourselves, and business places for the community, will occupy a plane that they have long deserved. In regard to the position of treasurer, to which you have elected me, all I can say is that having but little time upon my hands, I would from that fact be obliged to

decline, but since you have seen fit to place me here, I will endeavor to perform the duties to the best of my ability, and hope that in their performance there will be nothing done to open up a charge for legal proceedings. I thank you kindly for the honor you have conferred upon me. (Applause.)

The Chair: Under the constitution adopted by you this morning, the next thing in order would be the naming of a director from each city represented here today, that director to serve as a delegate at large from that city at the next convention. In order to avoid confusion, and to give each delegation a chance of consulting with its members, it would be well to postpone the nomination of such directors until tomorrow morning.

Mr. Harkness, of Philadelphia, seconded the motion, which was carried.

The Chair: We are now ready to receive further resolutions that may be in the hands of the members.

J. Milton Blair submitted a resolution on lien laws.

The resolution was referred to the Committee on Resolutions.

Mr. Campbell offered a resolution on the word "Master."

The resolution was referred to the Committee on Resolutions.

Mr. Geo. Roydhouse (Philadelphia) submitted a resolution on uniformity of constitution and by-laws.

The resolution was referred to the Committee on Resolutions.

Mr. E. E. Scribner (St. Paul) submitted a resolution on lien laws.

The resolution was referred to the Committee on Resolutions.

Mr. W. J. Stapleton (Detroit): There is a clause in our constitution that requires the Board of Directors to report to the annual convention a certain amount of assessment per capita for defraying the expenses of the National Association. Now, inasmuch as the officers that you have elected, or are about to elect tomorrow morning in the shape of directors, do not take their positions as officers of this association until after this convention adjourns, I move that the officers of this convention consult together as to what the probable expense will be for the ensuing year, and ascertain as near as possible the number of members of the different associations that are represented here, so that they may be able to report to us tomorrow morning a sum per capita to be assessed, that this convention can accept and adopt for the use of the incoming board.

Motion was seconded and carried.

A paper was offered by P. B. Wight, of Chicago. It is printed in full elsewhere in this issue.

On motion of the secretary, Mr. W. H. Sayward, the thanks of the convention were heartily tendered to Mr. Wight for his unusually able and interesting paper.

The Chair: In the paper just read by Mr. Wight he states that the American Institute of Architects, and, laterally, the Western Association of Architects, are the only body that have striven for a uniform contract system. Doubtless those are facts as he understands them; but in order to make the record right, and put credit where it is due, I desire to say that the Chicago Master Masons' Association, three years ago, made an effort in that direction. The result of its labors is embodied in a printed pamphlet, and if there are no objections, a copy of that pamphlet will be given to the Committee on Resolutions at the same time.

Mr. Blair (Cincinnati): I understand that the Boston Master Builders' Association were consulting on the form of a contract in January last, when we were there at the conference, and I would like to ask Mr. Sayward if anything was done to perfect that form of contract.

Mr. Sayward: The fact as stated by Mr. Blair is correct, and we are still in conference with our society of architects, but have reached no conclusions as yet.

It was moved and seconded, that the printed paper now in existence, and prepared by the Master Masons' Association of Chicago, and the contract about to be prepared by the Boston Association of Architects, and any other papers bearing on that subject, be referred to the Committee on Resolutions. (Carried.)

Adjourned to 9:30 o'clock Wednesday morning.

THIRD DAY—MORNING SESSION.

The meeting was called to order by the chairman at 10:30 o'clock.

The roll call resulted in 104 delegates present and 16 absent. The following directors were then elected:

For Cleveland, Ohio: Thomas Simmons. For Milwaukee, Wis.: Thomas Mason. For Charleston, S. C.: Henry Oliver. For Nashville, Tenn.: J. N. Phillips. For Detroit, Mich.: W. G. Vinton. For Baltimore, Md.: William Ferguson. For Chicago, Ill.: George C. Prussing. For St. Paul, Minn.: E. F. Osborne. For Buffalo, N. Y.: Charles Berick. For Cincinnati, Ohio: James Allison. For Philadelphia, Pa.: William Harkness, Jr. For Columbus, Ohio: Thomas Kanauss. For Indianapolis, Ind.: W. P. Jungclaus. For New Orleans, La.: F. H. West. For Boston, Mass.: Leander Greely. For New York City: Marc Eidlitz. For Troy, N. Y.: C. A. Meeker. For Worcester, Mass.: E. B. Crane. For Grand Rapids, Mich.: W. C. Weatherby. For Sioux City, Iowa: F. F. Beck. For Pittsburgh and Allegheny City, Pa.: Samuel Francis. For Providence, R. I.: George R. Phillips.

The Chair: We will now hear the report of the Committee on Resolutions.

REPORT OF COMMITTEE ON RESOLUTIONS.

To the National Association of Builders:

GENTLEMEN,—Your committee have carefully considered the resolutions referred to them, and offer the following as their report:

The resolutions submitted were as follows:

1. On attitude of employers toward labor associations. Submitted by the Boston delegation.
2. On apprenticeship. Submitted by Philadelphia and New York delegations.
3. On payment by the hour. By Boston delegation.
4. On building contracts. By Chicago delegation.
5. On lien law. By Cincinnati and St. Paul delegations.

6. On safeguards against accidents to workmen and others in the erection of buildings. By New York delegation.

7. On insurance of workmen against accident and provision of annuities to those permanently disabled. By New York delegation.

8. On elimination of the word "master." By New York delegation.

9. On uniformity of constitution and by-laws for filial associations. By Philadelphia delegation.

10. On uniformity of measurements. By Indianapolis delegation.

The last three resolutions are returned to the committee with the recommendation that they be favorably referred to the Executive Committee.

The first seven resolutions are returned with the recommendation that they be adopted in the form of a declaration of principles, which your committee have prepared, preserving as completely as possible the original wording.

In this connection your committee desire to state, that as the preamble offered by the New York delegation, with the suggestion that it be used in connection with and preceding the constitution, was *not* so used, they have taken the liberty to consider that also, and report that they believe the ideas and suggestions therein contained are fully expressed in this platform.

Those portions of the original resolutions not appearing in this declaration (consisting mainly of reference to method of carrying out the principles or ideas involved), together with a draft of a uniform contract prepared by the Master Masons of Chicago, your committee recommend should be referred to the Executive Committee for their action.

Declaration of Principles.

First, This association affirms that absolute personal independence of the individual to *work or not to work, to employ or not to employ*, is a fundamental principle which should never be questioned or assailed; that upon it depends the security of our whole social fabric and business prosperity, and that employers and workmen should be equally interested in its defense and preservation.

While upholding this principle as an essential safeguard for all concerned, this association would appeal to employers in the building trades to recognize that there are many opportunities for good in associations of workmen, and while condemning and opposing improper action upon their part, they should aid and assist them in all just and honorable purposes; that while upon fundamental principles it would be useless to confer or arbitrate, there are still many points upon which conferences and arbitrations are perfectly right and proper, and that upon such points it is a manifest duty to take advantage of the opportunities afforded by associations to confer together to the end that strikes, lockouts, and other disturbances may be prevented.

When such conferences are entered into, care should be taken to state clearly in advance that this fundamental principle must be maintained, and that such conferences should only be competent to report results in the form of resolutions of recommendation to the individuals composing the various organizations participating, *avoiding all forms of dictatorial authority*.

Second, That a uniform system of apprenticeship should be adopted by the various mechanical trades; that manual training schools should be established as a part of the public school system; and, that trade night schools should be organized by the various local trade organizations for the benefit and improvement of apprentices.

Third, This association earnestly recommends all its affiliated associations to secure, as soon as possible, the adoption of a system of payment "*by the hour*" for all labor performed, other than "*piece work*" or "*salary work*," and to obtain the coöperation of associations of workmen in this just and equitable arrangement.

Fourth, That all blank forms of contracts for buildings should be uniform throughout the United States. That such forms of contract, with the conditions thereof, should be such as will give the builder, as well as the owner, the protection of his rights, such as justice demands. That whenever a proper form has been approved by this association, after consultation with the American Institute of Architects, and the Western Association of Architects, we recommend its use by every builder and contractor.

Fifth, The legislatures of the various states should be petitioned to formulate and adopt uniform lien laws, and every organization represented in this association is recommended to use its best endeavors to secure the passage of the same.

Sixth, Architects and builders should be required to adopt more effectual safeguards in buildings in process of construction, so as to lessen the danger of injury to workmen and others.

Seventh, We recommend the adoption of a system of insurance against injuries by accident to workmen in the employ of builders, wherein the employer may participate in the payment of premiums for the benefit of his employés. Also in securing the payment of annuities to workmen who may become permanently disabled, through injuries received by accident or the infirmities of old age.

On motion, the report of the committee was received.

Mr. Watson (Philadelphia): I move it be adopted as read.

Mr. G. A. Cochran (Pittsburgh): In the name of the Pittsburgh delegation I would say that we have no objection to that resolution, with the exception of the last one read, referring to insurance guarantees. To that we do certainly object. I think it is entirely wrong for this association to offer such a resolution. I think the proper way is that every workman should be responsible for himself, and should be paid sufficient wages to live on so he can put away something. This thing is simply putting a premium on pauperism.

Mr. Adams (Indianapolis): Does the motion of our friend contemplate adopting this resolution as a whole? If so I would offer as an amendment to take it up section by section and adopt it seriatim.

Mr. Campbell (New York): I trust the amendment will not pass. I think it is palpable to the men of this convention that it must be that if we, who have not studied the details of these resolutions, undertake to

manipulate them now that we are going to get into an interminable turmoil here that will do us no good whatever. We do not suppose it possible that every resolution, and every word that is embodied in the report of the committee who have had to consider so various an amount of ideas and suggestions and avoid running counter to such obstacles as they would naturally find in the way. We cannot suppose it possible that such a report should be framed as to meet the entire approbation of a convention of this kind. There is always a certain percentage of humankind that naturally kicks at everything, and it is impossible to legislate entirely for that class. I have such unbounded confidence in a committee of such an intelligent degree, that I am willing to concede that they know much more after digesting all the subjects before them, than I do about it, and I am willing to yield something of that which I may entertain in my own mind in deference to the labor and intelligence of that committee.

I trust that this convention will not disturb the resolutions as they stand. It may be that some new resolution might be adopted to express what is desired, but if I may be permitted to make one single allusion upon a remark that has been made in this connection, I would say this convention cannot afford to go before the world with any sentiments expressed that are not of a liberal and far-reaching nature. (Applause.) The suggestion or idea that is embodied in the last resolution, and the one the gentleman has taken exception to, is one of those gigantic strides in advance and progress that is worthy of the intelligence of this convention, and I trust it may pass. (Applause.) We cannot be bound down by any narrow gauge ideas. We cannot possibly ignore the fact that there is another factor in the grand scheme which covers the whole broad question of building interests, and that factor is an important one. It is a fact that there are workmen, and they must be recognized and considered. (Applause.) Now, sir, when we began the march of progress, by extending the right hand of generosity and liberality and kindly feeling toward the workmen what will be the effect? The effect will be to attract them toward us. It must be so. What is the most desirable end to be gained? It is that the best possible feeling and understanding may arise and exist between the workman and the employer. I have looked forward with a great deal of interest and anxiety toward the development, in the hope that it would discover some master minds, that would be able to deal with this vast problem, and solve this important question which exists today in our land, to our great vexation, that of the conflict between labor and capital. We need, for the success of ourselves, and for the development of ingenuity, industry and morality and comfort of our fellow citizens who are, unfortunately, so situated in life that they must work day by day for their daily bread, that they should be educated and that they be taught, and that we do all we can to impress them with the idea that our interests are mutual, and must be considered together.

Perhaps, Mr. Chairman, I have infringed upon the privilege of speaking to the amendment, but I trust not. I hope this amendment will not pass.

Mr. W. H. Sayward: If I may be permitted, as chairman of the committee that reported the resolution, I would say I have been delighted to hear what the gentleman from New York has said, because I feel that this is a day and place when just such sentiments as his should be spoken; because I know that they are in the hearts of everyone of us. But I do not approve of acting upon these resolutions, as a whole, for several good and sufficient reasons. We have here together a large body of men, some of us having thought of these questions quite thoroughly in all their details, many others who have not. I want, because I feel exactly the same as the gentleman from New York, to have the opportunity, as these various details are brought up, to explain to any gentleman who may not thoroughly understand them, what I believe to be the reason for and the reason why we should adopt them. I want to have an opportunity, without mixing it up in a bunch, all to be considered together. And in addition to that, it is a more business-like way. I want to have an opportunity to reiterate when we come to this resolution in regard to the attitude of employers toward labor organizations, to say here in Chicago, the heart of the continent, and the widespread arena of listeners that we shall have, that I believe it is right for associations of employers to confer together with the associations of the employes upon questions that it is perfectly right and proper that we should confer upon. I want to be able to say that we have gone through with this convention having thoroughly considered every word and every line of what we do or offer, and unless we take it up section by section we are likely to leave out something which it is best to consider a little more carefully. In addition to that, remember that all of these delegations from the various parts of the country are going home to their constituents, and they want to have something to report to those constituents; they want to be able to tell them in detail what has been done and what has been talked about, and if we consider this in the whole we shall not have the opportunity of saying all that we want to. Mr. Chairman, I support the motion to amend and discuss this section by section.

Mr. Campbell: I would say that the remarks coming from the committee have convinced me. (Applause.)

Mr. Adams (Indianapolis): I too, like to listen to our friend from New York, for there is music in his voice, and logic in his words, and for the very reasons that he gave sufficient in themselves to justify the mover in making the motion he did. I speak, not for the delegation of which I am a member, but only as an individual, and I would say that I could adopt the resolutions coming from the committee in the whole without a moment's hesitation, but Mr. Chairman this convention is convened for the purpose of viewing the matter in all its phases. We come from all parts of this country where different conditions exist. What would affect the gentleman in New York, possibly would not affect us in Indiana, and it is for the purpose of the most full, free and complete discussion of the questions involved that I offered the motion. If this convention shall do nothing more than bring the interests of the employer and the employe closer together, whereby we can affect a more harmonious action, it will have accomplished much, and will have done a great and good work, and I believe Mr. Chairman that this convention cannot afford to rush through

now, at the last day, in the manner proposed by our friend from New York. They are the final results of the labors of this convention as embodied in these resolutions, and it is for a thorough and complete opportunity for all to discuss them that I offered the motion in good faith. (Applause.)

The motion to take up and adopt seriatim was then put and carried, and the secretary proceeded to read the resolutions.

Regarding Article VII, Mr. Eidlitz of New York said: I hope this resolution will be passed. It is, I suppose, hardly possible for anyone to bring out in his own mind such a scheme as he would have for himself. It is a matter of form, which life insurance people could determine, but in answer to our friend from Pittsburgh, I would say this, that what we mean by "participating" is simply that we might recommend our men to get their lives insured. I do not mean that we should go to work and insure every man in our employ, but when a man shows his willingness to insure his own life against accident, we, as the employers, should pay a certain part of that premium. How this is to be done will in the future be shown; that is the idea.

Mr. Osborne (St. Paul): There are some features in connection with insurance for our workmen which I do not think have received the consideration they should. In years past, we in America, have followed the general laws and principles in vogue in Europe, which were that the servant was dependent upon another. Our methods of doing business here in America have wiped out that word servant very largely, as we have seen before us here, there is a strong feeling that the word "master" should be eliminated from all our proceedings, which means that the word servant should be eliminated. Now, in dealing with the matter of insurance, it has been considered that one servant was dependent upon another, and that the employer was not responsible for the accident to the servant which has been partially brought about by the negligence of some other servant. But the magnitude of our railroads and other enterprises has been such that what is ordinarily understood in the English language as a servant it makes him a master. I trust the matter of insurance will be carefully considered and adopted.

Mr. I. G. Hersey (Boston): While I think the principle all right, I think we ought to be very careful and not have the men think that we are going to compel them to come into this scheme.

Mr. Cochran (Pittsburgh): I do not think that we ought to attempt to pay annuities for anybody, because I think that every workman ought to feel that he is responsible for himself, but we do stand here today, and say that every man that works ought to be paid for his work; that he ought to be paid a good, fair wage, so that he can provide for insurance and pay for it. Every American mechanic is able to take care of himself, if you give him enough.

Mr. Stevens (Philadelphia): Mr. Chairman, I think the resolution is exactly in accordance with the remarks of the gentleman from Pittsburgh. These resolutions are not obligatory; they are altogether in the shape of recommendations.

Mr. Scribner (St. Paul): It is simply a business proposition.

Mr. Graveson (Cincinnati): It seems to me that there should be no objection to this resolution, as it is not obligatory.

After considerable discussion, the resolution was adopted as a whole.

Mr. Scribner: My delegation requests me to move a vote of thanks to the Committee on Resolutions, and especially to its chairman, for the remarkably able manner in which they have considered, collected, and presented to this body, the resolutions offered by the various delegates.

The following resolution was offered by Mr. Tapper of Builders' and Traders' Exchange, Chicago:

WHEREAS, This convention has, through the skill, intelligence and devotion of its officers, been conducted in a manner so perfect and thorough as to reflect the highest degree of credit on the entire fraternity assembled to organize one of the most important associations known to commercial economy; and,

WHEREAS, The press has, through its intelligent and genial representatives, faithfully and generously given publicity to our proceedings, therefore be it

Resolved, That we, the delegates occupying the floor, extend our warmest thanks to the officers of this association for their unswerving courtesy and impartiality. And, further, be it

Resolved, That we also hereby record our gratitude to the various newspapers for their kindness and faithfulness in rendering invaluable assistance by publishing to the world our proceedings.

WHEREAS, The Western Association of Architects have formulated a bill providing for the examination and licensing of architects for the purpose of regulating the designing, planning and erection of buildings in the interest of public health and safety, and placed it in the hands of committees to be presented before the legislatures of the different states for passage; therefore,

Resolved, That we hereby indorse such a measure, and recommend the members of the National Association of Builders to give to the architects of the Western Association and the several state associations of architects any assistance possible in securing the passage of such a law to secure greater safety in the erection of buildings.

The resolution was accepted, and adopted unanimously.

The committee upon per capita tax reported in favor of \$2 for each member, and was generally discussed, and finally, upon motion, the report of the committee was adopted.

The following dispatch was read from Cincinnati:

J. M. Blair, *Grand Pacific, Chicago, Ill.*:

March 31, 1887.
Express to the Convention our very great appreciation of the high honor conferred upon our Exchange and city, not only in the selection of its presiding officer, but in locating its next convention in Cincinnati. We will endeavor to make you all happy.
J. H. FINNEGAN, *President*.

The following reply was read to the convention and ordered sent:

To the National Association of Master Plumbers:

GENTLEMEN,—Your kind message of congratulation is gratefully acknowledged. It is gratifying to know that the purposes for which this convention has been called meets with the approval of your association, and in accepting your cordial expressions and wishes for our success, we extend to you in return our heartiest thanks, and express the hope that all action by our two national bodies will be harmonious in all their attempts to benefit all classes connected with the building trades.

Faithfully all, W. H. SAYWARD, *Secretary*.

The following resolution was offered by Chas. H. Reeves of Philadelphia:

The delegates to this National Convention of Builders, through their various chairmen, desire to express to the Chicago Builders' and Traders' Exchange, also to the

citizens, their appreciation of the hospitable treatment received during their stay in the city, in attendance upon the convention. We expected, of course, in coming to this beautiful city of the West, whose fame for hospitality has spread far and wide, to find a cordial as well as progressive people. We have not been disappointed. We find that the improvements have been far in excess of anything we could have conceived to have been accomplished in so short a time. The lofty buildings, the fine banks, large churches should certainly be called the eighth wonder of the world. The Reception Committee, who have provided and carried out such varied entertainments, and on so generous a scale, deserve particular praise for their devoted attention. Therefore

Resolved, That the thanks of the convention be and are hereby tendered to the Chicago Builders' and Traders' Exchange, and to the citizens of Chicago, for their many acts of courtesy, and their boundless hospitality during their stay in the city.

Resolved, That a copy of this resolution be sent to the Chicago Builders' and Traders' Exchange and be entered upon the minutes of our proceedings.

CHAS. H. REEVES, Philadelphia.

The following resolution was formulated by R. C. McLean, of THE INLAND ARCHITECT, and presented by J. S. Stevens of the Philadelphia delegation:

WHEREAS, The Western Association of Architects has formulated a bill providing for the examination and licensing of architects, for the purpose of regulating the designing, planning and erection of buildings, in the interests of public health and safety, and placed in the hands of committees, to be presented before the legislatures of the several states; for passage; therefore,

Resolved, That we heartily indorse such a measure, and recommend the members of the National Association of Builders to give the architects of the Western Association and the several state associations of architects any assistance possible in securing the passage of such a law to secure greater safety in the erection of buildings.

The resolution was referred to the Executive Committee.

The following resolution was offered by president-elect J. Milton Blair:

WHEREAS, The press of Chicago have, with their usual enterprise, sent to this Convention their best reporters, and have published uniformly fair and full reports of each day's proceedings, therefore be it

Resolved, That a vote of thanks be extended to the press of the city of Chicago, and that this resolution stand not only as a recognition of our appreciation of the courtesies extended, but a testimonial of our belief that the newspaper is an important factor in the success of the building interests.

The following telegram was received:

PITTSBURGH, Pa., March 29, 1887.

To the President of the National Association of Builders, Grand Pacific Hotel:

In the name of the twelve hundred members of the National Association of Master House Painters of the United States I congratulate you upon your first national convention. I pray the Almighty to guide your deliberations, and offering you our motto, "Industry, Prosperity, Fraternity," and persistent work for the good of our cause, and God speed, I regret I cannot be with you.

TITUS BERGER,
President National Association Master Painters.

The Chair: Do any of you know any reason why I should not now introduce to you your president-elect.

Amid cheers, Mr. Blair took the platform, and said: If I was the presiding officer of this convention I should declare this proceeding out of order. The working of our constitution just adopted, is that the new president takes hold after the present convention is adjourned. Allow me, gentlemen, to digress a little, and say that I thank you for your personal compliment to me. I should like to meet the members of the new board of directors and the executive board, at 3 o'clock this afternoon.

Three hearty cheers were then given for Mr. W. H. Sayward, and the convention adjourned to meet at Cincinnati the first Tuesday in February 1888.

THE BANQUET.

On Thursday evening, March 31, the Chicago Builders' and Traders' Exchange gave its annual banquet to members and guests at the Grand Pacific. The delegates to the convention and about fifteen Chicago architects were present. The entire attendance was about four hundred. A very tasteful menu card was given to each guest. On its face was an appropriate design, by W. G. Williamson, of the Chicago Architectural Sketch Club. Mr. George Tapper, president of the Chicago Builders' and Traders' Exchange, presided, and after the excellent menu was discussed, called the assembly to order and spoke as follows:

Gentlemen, Members of the Builders' and Traders' Exchange,—I greet you on this, our annual banquet. We have with us this evening, as our guests, gentlemen from other cities who are engaged in the several building trades, and in behalf of the Builders' and Traders' Exchange of Chicago, I extend to our honored guests a hearty welcome (applause), a welcome not of mere words, I assure you, but from the very depths of our hearts, and we hope that your brief stay with us has been as pleasant to you as it has been to us. (Applause.) During the last three days, gentlemen, we have been engaged in organizing a National Association of Builders. The foundation has been laid for a grand superstructure, which, I have no doubt, will be a great and lasting benefit to the building interests of this country. It has been said, "Why should we builders organize for mutual benefit?" I answer, why not? Almost every trade combines for its mutual benefit. The railroads, the iron, the coal and other interests have strong organizations for their protection. The building interest is second to none. (Applause.) Look for a moment and see how our cities have been built up in the last thirty or forty years. When I came to Chicago, in the spring of 1852, there were only 42,000 inhabitants. Today we have at least 800,000; probably in this county, a million. Other cities all over this country have grown rapidly. Look for a moment at the amount of capital which must be invested in building every year. Our friend from Philadelphia gave us an idea of that yesterday. There is no cast of business men that have greater responsibility than the builders. The architect, to a great extent, must rely upon the integrity and ability of the builder for the proper execution of his plan. (Applause.) Delegates of the convention, I congratulate you upon the grand work that you have commenced, and may it go forward until it becomes a power that will be felt all over this country for our common interests. Gentlemen, again allow me to welcome you to our banquet this evening. (Applause.)

President Tapper then introduced William H. Sayward, by remarking: Gentlemen, the first toast of the evening is "Our National Association;" and the gentleman who is to respond to this toast needs no introduction from me. We all know him. My friend, Mr. Prussing, at the opening of the convention called him the apostle of our National Association. May I be permitted to call him the father of the National Builders' Associa-

tion? (Applause.) You all know who I mean, William H. Sayward, of Boston.

Mr. Sayward was greeted with cheers as he arose and addressed the banqueters as follows:

Mr. President and Gentlemen,—I rejoice in the privilege of speaking to the toast you have proposed, and I feel gratified by the honor you have conferred upon me. I need not say to you how proud I am to be here at this time, and to feel that you know how dear this scheme, if you please to call it such, has been to me. How delighted I am to find that you, gentlemen, here in Chicago, appreciate all the effort, all the pains, all the enthusiasm that have been put into it, and have met it with all the enthusiasm of your hearts and souls, as you have sent out to me and to all the delegates who have come here into your midst your hearty welcome and your enthusiastic hospitality. (Great applause.) Owing to the great pressure of work upon my hands, I have been obliged, for the first time, to commit to paper the words that I wish to say to you; for I have felt that it was due, in answer to a toast which for the first time has been heard in the United States, that I should say something that was worth saying, and that should have been considered at least a half-hour before it was spoken; and so I may ask your pardon if I read to you a few words that have occurred to me as suitable to use in reply to the toast of your president, the "National Association of Builders." (Applause.) What a picture this title of our new association calls up as the mind flashes over the wide space of years that separate us from the time when first the foot of the white man touched the shores of this continent! We can seem to hear his ax ringing through the mighty aisles of the forest, as the first tree was felled, and the first timber was hewn to build the first house in this land, that was soon to be known as the land of the free and the home of the brave. (Great applause.) What mighty panorama is rolled out before us, taking in its gigantic sweep all the progress from that day to this, in that noble calling which we are proud to name as our own! We see the timid settlers building their log huts along the sea-girt shore, from the cold and rocky promontories of New England down to the mild and inviting regions of the more favored South. We see how these first adventurous habitations stand, bare and meager, hesitating in their simplicity, upon the shore, like mere specks against the limitless expanse which spreads out behind them; and yet we know that from these weak beginnings, followed surely on that tremendous growth which has filled the land with life, and has built mighty cities all over this trackless wilderness, and bound them together with bands of steel. From the log hut of the pilgrim, which but poorly sheltered him from the cold blasts of winter, we follow on and on in successive stages of change and power, till here, in this mighty city of the West (applause), we gaze in wonder at those majestic buildings whose tops almost reach heaven. How wonderful the transformation and how great the change! And in it, and through it, and as a most intimate part of it all, the builder stands. (Applause.) His form is seen in every change, his hand has followed every line in which the growth of our country has been written. The hand that modeled the first poor house on Massachusetts bay was rough, perhaps, perhaps unskillful, but it held the germ of power, and through all the manifold stages of advance we saw it gaining skill and strength, until at last, as with magician's wand, it molds and fashions from some desert waste a mighty city in a single night. (Great applause.) Its firm grasp has wrenched the granite from its native hills, and by its skill has wrought it till polished shaft and column fling back the glitter of the morning sun. From towering forests, which at first were asked to yield but the roughest forms to meet roughest needs, have been fashioned wondrous and luxurious forms to meet the growing needs and tastes of men, till now, from east to west, from north to south, the country lifts within its liberal palm the bounteous exhibit of the skill of man.

We, brethren, are representatives of the various callings that have been instrumental in this mighty work of wresting from the grasp of creation the elements and substances useful for the shelter, protection, comfort and satisfaction of humanity, in the form of dwellings and buildings for their life and work. Our callings are close down to the first need of man, and they must keep pace with his growth; they must stand ready to answer his demands and anticipate them. But we are not to forget ourselves, and while we are instrumental in building up the cities and towns and villages of this dear land of ours, and devoting our lives and skill to the perfection of our trades, we are not to omit the duty which we owe to each other as members of a common calling, and our duty to those intimately associated with us in carrying on the business of building. Too long, too long, has this duty been neglected. Too long have we been unmindful that our individual interests will suffer if we do not unite these interests with the interests of others in the same calling; and though we have delayed, and suffered because of the delay, it is not too late, and here and now in this great beating heart of the country, we have formed a noble alliance. (Applause and cheers.) From this central, life-giving source will flow through countless arteries a new life and power, which shall vitalize and strengthen all, both far and near.

This, my brothers, is an era of associations. The various branches of industry are waking up to the good that comes from being associated together and knowing each other better. Let us not be behind them, but let our movement be as widespread as the country itself. Would to God that this era of good-fellowship, this era of hand clasping hand, among the various callings, had come thirty years ago. (Applause, and cries of good, good.) Then would this dear country of ours have been saved that awful struggle which drenched the land with blood, and in which half a million of our sons were slaughtered. Then would have been saved the terrible sorrow and pain which still lingers in the hearts of thousands more.

My brothers, let us hope that this new association of ours will fulfill even more than appears written in its constitution, and be the means of binding us together, north and south, east and west (loud applause and cheers) in bonds of friendship ever growing stronger and stronger, for our dearest hope is always with this land of liberty. Its cause is ours, whether we be to the manner born, or have sought its shores in search of that freedom and opportunity which no other land can give. (Renewed applause and cheers.) To our country as to a mother, we come and lay

our offering at her feet, with the consciousness that the sorrows and trials and tears of the past have but built up for us a stronger country and a higher hope. (Applause.)

Oh, Mother Land, though stained with blood,
And wrenched with civil strife and feud,
How beautiful thou art, how fair!
And as the blood-wet strands of hair,
Parted by glorious brows around,
Do typify a strength new-found,
So 'round thy form, a sturdy band,
Thy reunited sons now stand;
And raise their loving voices strong
In one note all the shores along.

Oh, Mother Land, our prayer to God
Is that the stain of fire and blood
May never more its purple trace
Leave on thy fair and loving face.
But if war's fateful blast shall sound
We pray that we prepared be found,
Ready in one united band
To fight for our beloved land.

(Loud and prolonged cheers, and applause.)

At the conclusion of Mr. Sayward's speech, President Tapper introduced Mr. Stevens, of Philadelphia, who, the president said, would like to tell a little story, apropos of Mr. Sayward's remarks. Mr. Stevens came forward and spoke as follows:

Mr. President and Gentlemen.—Of course you won't expect me to make any extended remarks. I have exhausted myself in that line with my talk to the convention. But the fact of the president, the presiding officer this evening, saying that our Brother Sayward was the father of this National Association, has reminded me of a little story that I heard told in Philadelphia not long since, to this effect. It was about Christmas times, and they were about preparing the church for a Christmas festival. The ladies, of course, had that matter in charge, and in arranging for the decoration of the rooms they found one particular place that would be appropriate for a motto. One of the ladies said, "Now, I will attend to that. I will get George to order the motto in the morning when he goes in town;" and she took the size of it, came home and told her husband, and he, as most business men, became immersed in his business and almost forgot his wife's message, but like a careful husband, before he went home to this suburban town, he put on his thinking cap, and among other things it just occurred to him that his wife had told him to do this, but he had forgotten the size of the motto, and even the motto itself. So he telegraphed home to his wife, and the operators were astounded when they received the following message: "Dear George,—Unto us a child is born and a son is given. Nine feet long and three feet wide." (Great laughter and applause.) Now, gentlemen, it strikes me that if Brother Sayward is the father of this National Association, he has a son larger than that. (Renewed laughter.) I certainly, with the rest of you, tender him my congratulations on this occasion. But aside, gentlemen, from joking about this matter, it strikes me that we have entered upon a new era. In one of the planks of our platform, as we may call it, that we adopted today, the system of apprenticeship was spoken of, the system of manual training, and advice was given to local associations to establish night schools for the instruction of apprentices. Gentlemen, there is a field open for us that will make a revolution in this country. In the slow city of Philadelphia—we are slow in some things, but when we get moving we go way to the front—we have established there and had for years a technical school. It is called the Spring Garden Institute, of which your humble servant has the honor, and has had for years, of being one of the managers. We give there technical instruction, mechanical instruction. We take the student, and in one year we put him in the architectural drawing class; the next year we put him down in the workshop and teach him how to work the lumber and make the patterns. We send him the next year to the foundry and teach him how those castings are made. The next year we put him at the shop and we teach him how to handle the hammer, the chisel and the file, and how to finish up the casting. That has progressed to an extent that it has been adopted by our public school system, and now we have a mechanical school in our public school system. It has been introduced into the Girard College where we have 1,500 students, boys ranging in ages from twelve to eighteen years. This is the work that is before us. The whole system of apprenticeship is changed. When you and I were boys at fourteen or fifteen years of age, we were sent apprentices and we worked at our trades, and probably boarded with our masters for four, five, six or seven years. Now the thing is wholly changed. A boy does not get his education in our schools until he is seventeen or eighteen years of age; we must supplement that lost time by giving him practical instructions as he goes along in the handling and use of tools. Gentlemen, I urge each one of you, more particularly the delegates who have come from distant sections of our country, to emulate us in this great work, so that a new era shall start forth in the history of our country in regard to our mechanics in which we shall not be subject and subservient to the foreign labor that comes flipping into our country one portion of the year and goes back to the other country for the balance of the year, but in which we shall educate and have American mechanics who shall do the work of the country. (Applause.) Mr. Chairman, as you have broken in upon the regular toasts of the evening, I thank you for the opportunity and ask you to proceed.

President Tapper: Gentlemen, we will now take up the regular order of exercises. The next toast is "The City of Chicago." Gentlemen, I want to introduce to you an intimate friend, who has been connected with the public works of Chicago almost ever since I have been here. I do not think there is any man in this city who knows more about Chicago than he does, and he no doubt will be able to give you a great deal of information in regard to our city: Mr. DeWitt C. Cregier. (Applause.) Gentlemen, I have the pleasure of introducing to you Mr. Cregier.

Mr. Cregier spoke as follows:

Mr. Chairman and Gentlemen.—Some two weeks ago, a member of your exchange called at my office and kindly invited me to this banquet.

Being one of the Chicago kind, who rarely declines a free lunch (laughter), I promptly accepted the invitation, expecting of course, to get a pasteboard to get in. During the past two weeks, being a laborer, like the balance of this audience (laughter), I had forgotten entirely about this occasion, until today, late this afternoon, I met half a dozen gentlemen, who said, "You are going to be at the banquet, tonight, are you not?" and all at once I thought of the invitation that I had received. I immediately went home, put on a clean dickey, and started for this tabernacle (laughter and applause), but how to get in, I did not know. All I received was a miserable piece of pasteboard—here it is (laughter), saying that this seat was No. 12 at a table. I met the proprietor of the tavern out here, and he asked me, "What do you want?" I said, "I was invited here." Being somewhat acquainted with our friend Drake, he let me in. (Laughter.) I had no ticket; no one sent me any, but here I am, gentlemen, and I notice by the programme that I am called upon to respond to the sentiment, "Chicago." And that reminds me, Mr. Chairman and gentlemen, of reading, not long since, of an unfortunate man who stood on the scaffold, awaiting execution of the sentence that had been pronounced upon him, when the sheriff turned around and said, "Have you anything to say before sentence is executed?" Being a bad man, he said "No." Whereupon a gentleman standing near turned around, and he said to the sheriff, "If the gentleman will allow me a portion of his unexpired time (laughter) I would like to address a few words to this audience." (Great laughter.) The sheriff, in the goodness of his heart, said to the culprit, "Would you like to have this gentleman say a few words in your behalf?" He said, "No; I'd rather be hung." (Renewed and prolonged laughter.) Gentlemen, if Chicago could speak, I verily believe that is what it would say to me tonight. But I have got a good text. The father of this organization, this association of the United States builders, has said to you, that his labors have prevented him from doing justice to the toast, and he therefore committed it to writing. So have I, being a child. (Laughter.)

Gentlemen, the toast that I am required to respond to requires time and talents. (Laughter.) I mean that now—you needn't laugh. (More laughter.) The one you cannot afford; the other, in the parlance of quite a number of board of trade men whom I see here tonight, I am short in. (Laughter.) Moreover, gentlemen, to speak of Chicago one must observe the well-known characteristics of Chicagoans, reticence and modesty (laughter), when referring to their city. To this natural custom may be ascribed, in a large measure, the material prosperity and high moral standing of our city. (Laughter.) This may seem strange to you, gentlemen, who hail from the great metropolitan centers of our country, and who doubtless are given to brag (laughter), and see more or less—more, I guess—of the wickedness of great cities. Do not, therefore, be disappointed if this element is lacking here. (Laughter.) We do not regard that as necessary to prosperity. (Renewed laughter.) We may, however, in behalf of Chicago, say that her citizens endeavor to keep abreast of the times—in other particulars—and meet the demands of a rapidly increasing and progressive community. Chicago, as a city, is but fifty years old this month. Nay, gentlemen, Chicago may be said to be but sixteen years old, since we may date our birth from 1871, when that awful calamity befell her which baptized her with fire, leaving most of her fair surface clad in the habiliments of a blackened ruin. But by the sympathy and aid of a generous world, the pluck, energy and indomitable will of her citizens, and the skill, courage and integrity of her builders, Chicago has risen to her present estate, and sits in her glory here at the northern limit of our commonwealth, a bright and shining star among the great cities of our republic (applause), earning the proud title of being the third city in population on the American continent and the first city in the world in many branches of trade. (Applause.) Two score and ten years ago Chicago was a frontier town, graced with a few comparatively rude buildings and a few hundred people. Her street pavements were of the kind known as "No bottom here." (Great laughter.) Designed and constructed by nature, the drainage system of the period was a little off color, although fashioned by those distinguished engineers, Long John and Mark Beauvieu. (Laughter and applause.) Chicago water and beer supply was then of about equal proportions, but all somewhat limited. (Laughter.) But, Mr. Chairman, the master builders in every line came to Chicago; they came from the East, the South, the North and from the Old World, and have kept coming ever since, and will continue to come as long as such banquets as these are given. (Laughter.) A great many of them are here tonight to greet you builders from abroad, who, by your achievements, have beautified and adorned the cities of our country with the grandest edifices of modern times; and while we may fail to impress you with anything like grandeur, you will find no truer or more hearty welcome on any part of God's green earth than you will with the builders of Chicago. (A voice, "That's so!" and great applause.) To attempt to recite the results of Chicago's master builders would be tedious; besides, to go into detail might disclose some soft brick (laughter), poor mortar, defective stone and knotty timber; but it may be said of them as was said of one of your ancient bosses, Sir Christopher Wren, if you would see the handiwork of the builders of Chicago, look all around you. (Applause.) Behold, gentlemen, Chicago's busy population of 750,000 souls—just 50,000 less than somebody spoke of here a moment ago. (Laughter.) Look along her nearly 700 miles of streets and note the many stately edifices towering eight, ten and twelve stories toward the clouds, built upon staple foundations, although resting on the treacherous prairie soil of our locality. Cast your critical eye over the lines of these structures and you will find them plumb, square and level (applause), embodying in their majestic proportions strength and beauty, the legitimate offspring of wisdom. Nary a crack, Mr. Chairman, will be found anywhere, except, possibly, in the United States building (laughter), and there I think—and I am looking at Brother Donovan now when I say that—I think by careful investigation it will be found to be the long lost and much dreaded crack of doom. (Laughter.)

Gentlemen, let your mind's eye, if you please, delve below the surface of Chicago and see six hundred miles of water pipe, conveying more than one hundred million gallons of water daily to the houses and factories of her citizens, water drawn from Nature's reservoir, covering an area of

23,000 square miles, and bearing upon its surface vessels which enter and depart from the port of Chicago, annually representing in the aggregate eight millions of tons burden. Speaking of water, Mr. Chairman, the amount used in Chicago is entirely exclusive of the beer and other fluids used daily. (Laughter.) The latter evidently is necessary to purify the water, which may be at times affected by the contents of five hundred miles of sewer. (Laughter.) From the presence of a number of glasses in the immediate neighborhood, and the black bottles here, I judge there is some doubt as to the purity of the water tonight. (Laughter.) Chicago too, may be called a city of bridges, as there are thirty-three of those useful links swinging across our river and uniting the three divisions in one grand metropolis. These bridges open and close from twenty-five thousand to thirty thousand times during a season of navigation, and each time they open there are from twenty-five thousand to thirty thousand people waiting with patience until they are closed (laughter); and being an industrious people, as you know, Mr. Chairman, they utilize the time in cultivating what we call here "bridge profanity." (Renewed laughter.) It is a peculiar sort of profanity, I assure you. It differs very much from the profanity that you visiting builders indulge in (laughter), in that it is louder, longer and deeper. (Great laughter.) It is a sort of local art, and is said to be easily acquired by gazing into the Chicago river (laughter), which at one time was the home of the sportive speckled trout, but like the festive buffalo the trout have moved away with the advance of civilization. (Laughter.) Some one has said—I think it was Mr. Purington—that the water in our river is not calculated to improve the morals of men or fish. (Continued laughter.) Mr. Chairman, the domain of honest labor that requires the sturdy arm and practical eye of the skilled artisan, and the directing head of the courageous and brainy master builder, to rear our homes and factories, become the great conservative power which everywhere reduces chaos to a state of civilization. This assembly of builders from every section of our country must be of itself productive of great advantage to all concerned. The interchange of sentiment and ideas among gentlemen here will tend to strengthen, not only fraternity among men of the common profession, but will deepen a bond of union between them as strong and lasting, let us hope, as the union they make between brick and stone. (Loud applause.) May your organization be thus firmly cemented, the better to promote the progress and advance of the art to which you are devoted. (Renewed applause.) I ought to have said, in connection with what I have tried to say, that you folks that live abroad in the various cities, and which has been so eloquently and beautifully covered by the "father" of this association—for he has traveled all over the country, I see, by his speech—that if you want any water all you have to do is to apply to Chicago and we will tap her. (Great laughter, and a voice: "What's the matter with Chicago?" Chorus: "She's all right.") Yes, she's all right. I want to say just one word more to wind up this magnificent effort (laughter), and that is, that I think I have stuck to the text "Chicago" just about as well as an eminent gentleman who recently visited this city from Boston, to deliver an address on American Culture, (laughter and applause) but who, either by accident or design, switched off and entertained his hearers with an account of the life and adventures of Richard III! (Renewed laughter.) Mr. Chairman, I beg to thank the gentlemen present, all of them, for their patience and condescension, and to the builders of Chicago I beg to return my thanks for the courtesy extended to me, which enables me to be here tonight to enjoy this elegant banquet, and this elegant mental affair. (Great applause.)

Mr. Prussing: Mr. Chairman and gentlemen, may we never forget that D. C. Cregier is one of the builders of Chicago! (Cheers and loud applause.)

President Tapper: Gentlemen, I know you all want to hear something of the Press of Chicago. The next sentiment is "The Press of Chicago." We have a gentleman here who always takes great interest in the Builders and Traders' Exchange, and it affords me great pleasure to introduce him to you—Mr. J. C. Beeks, of the Chicago Times.

Mr. Beeks responded as follows:

Mr. President and Gentlemen,—I could have wished that this mantle might have fallen on some one more worthy to respond to the toast "The Press of Chicago." First let me say that it has been a source of pleasure to the press of the city of Chicago to report the proceedings of the first convention of the national builders held in this country, and to say to you further that they have tried to do their duty, and from the sentiment expressed by many of you I know you are satisfied they have done it well. As my friend Mr. Cregier has said, an example was set for him because he was a child in the art of responding to toasts, I wish to say that I want to take advantage of that example, because I am merely an apprentice to the master builders of this country, and I have selected my text and I will read my little piece. I want to say further that when I refer in this to master builders I mean a master builder in the sense in which it has been accepted for many years, and that is, one who is capable of building, one who is master of his profession and not master of his employes. (Applause.) And when I refer to the press as a master builder I mean it in the same sense, because the members of the press who are the senior members, who are the guiding stars of the press of this city and this country, are master builders in their profession and guide us in every work we do. Mr. President, permit me to remark, in laying the foundation for what I shall say, that the delegates present might never have heard of that magnificent pile of modern masonry, called Chicago, had it not been for that master builder known everywhere as The Press. Master builders who are here from the cold north, represented by the dual city, St. Paul-Minneapolis, where the press claims the master builder has more to do than at any other place in the known world; from the perennial sunshine of the south—New Orleans—where the glinting rays of Old Sol, at white heat, glance from the walls of architectural beauty; from the golden slope of the far West, where the Pacific winds play upon an enterprising press; from the far East, where the center of civilization is supposed to have budded—if the press tells the truth—from even Boston; would not have heard of the greatness of Chicago, and might have located the first convention of the National Association of Builders at some less

important village, had it not been for the press. As a representative of the press of Chicago I am glad that these delegates from everywhere have had an opportunity to see what the western builders—and the press—have done to create a great city. They have been dazzled when permitted to contemplate the progress made; when told of the millions of wealth by which they are surrounded; when advised of the growth of its business interests; of the enterprise of a people that have erected a great city upon a swamp; of the thrift of its merchant princes; of the magnificence of its palatial structures; its railway interests; its suburbs; its splendid boulevards and avenues; the rapid increase in population; the evidences everywhere that Chicago is destined to become the metropolis of the country. And, that great master builder—the press—has had much to do in shaping the architecture, rearing the walls and perfecting the greatness of this splendid pile of masonry. A master builder is recognized as such, not only for his ability to rear a magnificent structure after plans prepared by the architect for his guidance, but because of his ability to comprehend those plans, and to skillfully weave together the crude materials which make up the strength, the harmony, the beauty, the stateliness of the edifice which grow in his hands from a *made* foundation to a magnificent habitation. Likewise, the press is recognized for its ability to rear a handsome structure upon even an *imaginary* foundation, the solid walls of which are indestructible, and its stately columns—symmetrical and beautiful in their architectural finish—that are the admiration of the world.

It is right that the press should be recognized as a great master builder by the representative master builders of the greatest country in the world. A master builder is supposed to be a great something, whether it is in the form of a man or a newspaper. It is expected of a master builder that he should be capable of erecting anything in the shape of a structure, from a log cabin to a marble palace. And he can. It is expected of the press, as a master builder, that it shall have the capacity to build the walls of public opinion so high that they will touch the silver lining of the clouds, and frame the destinies of men, cities, countries, upon a foundation that will withstand the shocks of time. And it can. Master builders recognize the potency of the press, and are living witnesses of the fact that no great enterprise can succeed without the aid of the press, which is one of the greatest master builders of the age. The press recognizes the potency of the master builder, and daily records the fact that to him the world is indebted for the monuments of skill and industry which have characterized construction from the time the Grand Master Builder created the world down to the grand display of modern architecture which has made the Chicago of today. The master builder, in order to erect an enduring structure, makes sure that his foundations are well laid, his materials carefully selected, the base firmly bedded, the superstructure erected in strict accordance with the plans, and the building made perfect as originally designed. When his work is completed he contemplates it with supreme satisfaction, it is good.

Likewise, the press plants its foundations securely; selects its materials with great care, rears its columns as solid as a rock, embellishes the beautiful superstructure, places the capstone on top, and then stands afar off, and—permits the public to contemplate the edifice which it has erected. Sometimes the public says it is good, especially if it pleases the observing, criticising public; but whether it pleases or not, it is the work of a master builder, and is more enduring than the monoliths of Egypt. Before the potency of the press was recognized as a master builder, the artisan engaged in the construction of buildings occupied a position of comparative obscurity. His crude efforts were rough. They were strong, perhaps, but not shapely. They were uncouth and lacked stateliness. The stretch of civilization was so limited that the embryo master builder was unknown beyond his bailiwick, if in that, and the demands of civilization were to him an unknown quantity. He was apparently satisfied, and he might have slept on in ignorance of the greatness of a master builder but for the press. The pioneer of civilization, the press, went before him, and blazed the way from crude construction to the grandeur of modern building. It awakened the dormant energies and qualities that otherwise might have slept forever. It opened the highways, and raised them from pole roads to the granite pavements upon which the wheels of trade rattle today. It preceded the blaze of the headlight, and laid the ties upon which is the steel rail of the great arteries of commerce. It called into activity the latent energies of the master builder, and warned him that he was needed. It has opened the way for the development of the master builder.

It demanded high art in the projection and construction of the modern building, and made it possible for the change to come from the crude artisan to the genius of construction. It made the master builder of today. The press did it. It made it possible for the master builder to achieve grander results than he believed to be within the compass of his vocation. It demanded strength, substantiality and durability as the successors of the frail structure that was the creation of the crude builder. It demanded harmony in exteriors and interiors, in place of the uncomely piles of masonry or lumber, in which there was not a point of symmetry to be discovered. It called for immunity from the devouring element in the shape of stately fireproof structures of modern times, with ventilation, elevators, steam heat, modern conveniences of every class. It demanded that the wants of modern civilization should be met, no, anticipated, and that the magnificence and stateliness of building should parallel that of modern man, to say nothing of modern women. And the potency of the press was felt in every demand made. As it called, the master builder sprang up and responded in a manner that plainly showed that the genius of construction needed but to be awakened in order to meet every demand made upon it by the press. As the press was able to see the wants of civilization, and call for the supply of material to meet them, so the master builder had the quick ear to hear the call and the ability to respond in a manner that indicates the fact that he was only waiting for an invitation to display the genius of building that can put a mansard roof upon any structure which the press may design. The genius of the master builder is wonderful, but the genius of the press is marvelous. (Applause.)

President Tapper: Gentlemen, I now want to introduce to you the president-elect of the National Association of Builders, Mr. Blair, of Cincinnati.

As Mr. Blair arose he was greeted with a volley of cheers and applause. Mr. Blair made the following remarks:

Mr. Chairman and Gentlemen of the Builders' and Traders' Association of Chicago.—I am compelled to differ from the "father" of our association and my predecessors, in the fact that my speech is not written. (Laughter.) Mr. Chairman and gentlemen, in behalf of the National Association of Builders of the United States, allow me to extend to you our thanks for the liberal entertainment you have given us since our stay in your city. A friend of mine said to me this evening, "Blair, why do you look so solemn?" Well, I told him I didn't know why I looked so solemn unless it was from the fact that we are to entertain this organization next year, and how can we do it after the example set to us by Chicago? (Applause.) Mr. Chairman and gentlemen, I speak it mildly when I say I feel very proud this evening. Why? I feel proud that I am a builder. (Applause, and cries of "Good.") I feel proud that I am a member of the National Association of Builders of the United States, and each and everyone of you should feel proud of the calling and avocation which you have selected. (Applause.) I was on a committee to frame a constitution for our Association, and although it was not expressed in that constitution it was understood—that is, it was understood by me specially—that after the officers were elected the vice-presidents were to do the speaking for the Executive Committee. (Laughter.) Now, we have a man that can fill this position admirably, Mr. John Stevens, of Philadelphia. He had rather talk than eat. (Renewed laughter.) So I will desist from further detaining you, and would call on Mr. Stevens, if he is present, to speak for the National Association. (Applause, and calls for Stevens.)

Mr. Stevens: Mr. Chairman, there is some blunder about this thing. I have done my talking. I talked at the convention, and I have talked this evening, and I have to talk on Saturday, I am told, up at St. Paul. Brother Sayward and myself have been termed the missionaries of this convention, and I suppose it will be our business to go around through the country and do talking instead of working, as we have been used to doing. (Laughter.) I think, Mr. Chairman, that you have others that can talk to you this evening much better than myself.

A gentleman proposed that Mr. Scribner, of St. Paul, be called upon for a few remarks, but that gentleman not being present, President Tapper called upon Mr. J. J. Egan, of Chicago, to speak upon the subject "The Master Builder of the Past."

Mr. Egan spoke as follows:

Mr. Chairman and Gentlemen.—Meeting for the first time in my life with a body so numerous, and so representative of the builders and artisans of the nation, and seeing around me so many whose names have been identified with the best and most enduring monuments of our country's progress, I need hardly say that I feel honored and flattered by this most gracious recognition, and embarrassed by the magnitude and the widespread interest of the ideas for which we have assembled, with which, in this time-honored sentiment you so kindly associate my name, and to which, however inadequately, I am expected to respond. Building is an art, and poet and essayist have dwelt in many a glowing page upon the enduring attributes of art, and around each grand memorial of the bygone time the muse of history has woven sad but splendid story, and throughout all that grand retrospect, recalling all that man has ever dared and done, we are ever and again compelled to stop and mark each passing period of that history's stately narrative, sealed and dignified with the giant signet of the builder hand; for not alone in lettered page and enduring parchment, not alone in cloister shade or in scholared cell, not alone in radiant tapestry or in rarest gem, was history written and read. But above and beyond them all with forceful period it was written in pyramid and in temple, in fortress and in citadel, in stately basilica and in ruined amphitheater. These are but the milestones on the top of history, and these were the work of the builder's hand. (Applause.) In every age, then, our work was noble, and in every age we have abundant testimony of the honored place assigned to the master builder, the master of his art; and as I look again around me on this most significant gathering of all that is forceful and promising in the modern builder's art, I am irresistibly carried back to that distinctive and fateful period of the middle age, when the ancient craftsman first discovered and nurtured into active life the very germs of our modern social structure and our civil freedom. When they gathered around each center and seat of ancient learning or ancient munificence, around some feudal stronghold or monastery's height and there, plying their various arts, they founded not only the grand monument whence the architect and the builder of today draw their inspiration, but they also formed and founded there a young and vigorous industrial community, and step by step bore down the assumptions of hereditary power, and gave the fatal blow to the idea of hereditary bondage, and, gradually building up around the palace cities of that older world, they organized those old historic guilds which in turn became the very nurseries of independent civil government (applause), which, to speak more figuratively, we may well take tonight as the stateliest of all the structures ever reared for humankind by the craftsman's power. Nay, not through tented field or through kingly pageant was freedom won. No feudal baron and no mail-clad warrior carved out that glorious path; but it was the keen blade, and the cultured hand of that ancient craftsman working in these guilds which, link by link, broke every vestige of bondage from the toilers' hands, and paved the way for art's triumphal progress. (Applause.) Then, gentlemen, well may we assemble here tonight in this happier period, and upon this free soil, to follow up the traditions and the associations which in those old days did so much for the benefit of humanity and for a toiling manhood. To the more pressing and practical ideas of the time, I do not feel that the sentiment to which I have to respond calls upon me to refer, nor, perhaps, is this the occasion, or is this the hour to refer to them. Other and wiser and more experienced counsel have not already been wanting, will not be wanting in the future, and will prevail to give force and significance to your every effort, and these efforts will be crowned with

success in the present as they were in the olden time in the builder's art an art, indeed. I do not know that I can add anything to what I have said. Your sudden and unexpected call found me somewhat unprepared to dwell more at length upon this most interesting and instructive subject. Gentlemen, I shall simply take occasion to thank you once more for your notice. (Applause.)

President Tapper: Gentlemen, I want to introduce Mr. Prussing, the president of the convention just held, who wishes to say a few words on behalf of the National Association of Builders.

Mr. Prussing: Gentlemen, I never knew before that it was necessary to introduce George C. Prussing to a Chicago audience. At the end of three days' labors, being in the chair, I find that there are a great many things unsaid that I would like to have said to the delegates that attended the first National Convention of Builders, and if the gentlemen of Chicago will excuse me I will address my remarks to the visiting delegates. Gentlemen, you have assembled in Chicago to lay the foundation for a national association for our common good. When I called you to order I expressed the hope that when upon that foundation an edifice should have been erected, that it would reflect credit upon the business tact and wisdom of its founders. Gentlemen, I do not hesitate to say that the work, as far as it has progressed, does reflect credit upon the wisdom, business tact, and moderation of its founders. (Applause.) Gentlemen, I consider it not only a pleasure but an honor to have been associated with you in the capacity of president during your deliberations for the last three days. Resolutions have been passed giving the chair and the officers—there were two, the chair and our secretary—credit for the manner in which the business was done. We had no chance to tell you before, but we do so now, that if it had not been for the high grade of intelligence of the delegates assembled here in Chicago, it would have been impossible to bring the business before the convention to its successful conclusion. (Applause.) I am delighted, gentlemen; I am proud of the position that I held during the last convention. (Applause.) But, gentlemen, remember that you have but laid the foundation for something that is to come. Remember that the resolutions passed require active work on the part of all of you, each one in his own sphere, each one in his own city, to carry them into effect. Remember that what we did is but the declaration of principles, and that in order to redound to the common good of us all, work must be done in your cities at home, in the organizations that sent you here. You, who have been elected directors, and all of you delegates, must do work in the cause; must of necessity work hard to the end of the year, so that when we meet in Cincinnati we shall have results to report from the work for which we have laid the foundation here in Chicago; and, gentlemen, while the hour grows late, I wish to arouse a spirit of enthusiasm for the work in hand akin to that among the delegation of Chicago. We, gentlemen, believe that good, lasting good, will come out of our efforts (applause), and with your assistance, all over this broad country, a year from now we will have results to report; we certainly ought to, we can, we must (a voice, "and we will," and we will. (Applause.) Mr. President, it is growing late; I will not keep you. Gentlemen, we have among us the president of the National Plumbers' Association, a gentleman deservedly honored by that position. From him I would like to hear what has been done in his branch of trade in order to encourage and strengthen the work of the men who attend here as builders of the national association. Is Mr. James Allison present? (Calls for Allison.)

Mr. Allison: *Mr. Chairman, and Gentlemen of the National Association of Builders.*—I thank you for the compliment in having been noticed in this very kind manner, I assure you. At this hour, and after the many good things that have been said, and the superabundance of good things that we have at this end of the house yet to present, I hardly think that you want any soft slobber at this time from a plumber. (Laughter and applause.) I can assure you, that I think that we can justly claim the title of godfather to this association. If our friend Sayward has been the father, I think that we have stood up for you, and are justly entitled to act as your godfather. ("Hear, hear" and applause.) Our national association, I believe, was one of the first formed, some five years ago. It has been to us a great benefit, and we have derived great good from it, and I would like to encourage you. I hardly know what I could say strong enough to give that encouragement that I feel that is deserving in this direction. For the Master Plumbers' Association, and on behalf of the Master Plumbers' Association of the United States, I extend to you a hearty greeting, promising you that we will stand firmly by the National Association of Builders. (Great applause.)

The president elect (Mr. Blair): Mr. Chairman, if I am in order, there is a Chicago gentleman that I know can make a speech, and I would like to hear him. I have heard him in the National Brickmakers' Convention at Cincinnati. I would call on Mr. Purington, if it is in order. (Calls for Purington.)

Mr. D. V. Purington: Mr. Chairman, I do not think I am treated quite fairly, and when I state my position, I am satisfied that the gentlemen here will agree with me. I did not mean to tell the story that is a little humiliating, not to me, but to the rest of you; but some two weeks ago, about the time that my friend Cregier was called upon, I was asked by a member of the entertainment committee if I would respond to a toast at this banquet. I did not like to be too anxious; I did not like to show that I was too willing, although I never refuse an opportunity of that kind if I have plenty of time. I told him I would think it over. I did not think very much, but I made him think I did, and he said if I wanted to respond to a toast he would like to have me name the subject, and I one evening at home thought the matter over and selected a subject very much as we boys used to select a subject for composition, for instance, like "The four seasons." You know we could say lots of things on both sides. And I handed him a card a couple of days after with two words on it, and those two words were, "Great Cities." Now, there are lots of things that can be said about great cities; but I am a little too fast. When I handed him the card he blushed and he stammered, and kind of worked himself around and said the committee had made other arrangements. Well, the long and short of it was, they concluded they didn't

want to hear me. He was very much embarrassed, about as much embarrassed as I am tonight to tell you the story. Of course if I had written out my essay, as brothers Cregier and Sayward and Beeks have here, on "Great Cities," I should have had a wonderfully eloquent paper; there is no question about it; there is not a particle of doubt about it. As I sat at home that night and thought over the subject of "Great Cities," the idea suggested itself to me that I would endeavor to illustrate that the character of the inhabitants of great cities could be told by the buildings in which they lived, and I proposed to read up all the encyclopedias and all the histories that I could find in my own and the public library, and get a long string to my eagle and let her soar. But here I am tonight, called upon after having been told that they did not want to hear me. My friend Blair is to blame for this. (Laughter.) He had no business to have said a word; but I just throw myself upon your mercy, gentlemen, and retire.

President Tapper: Gentlemen, I want to now introduce to you another Chicago gentleman, the secretary of the Chicago Master Painters' Association, Mr. J. G. McCarthy. Some of you have seen him before, as he was at the Boston conference.

Mr. McCarthy: *Mr. Chairman, Gentlemen of the National Builders' Association*.—I am a good deal like the gentleman who has just taken his seat, in some respects. I feel that perhaps there has been such a flood of eloquence hurled at you this evening, that having had all manner of subjects talked about, having been thoroughly on all matters pertaining to building, having had all the social thoughts of a visit to Chicago vividly portrayed to you, having had the many good things that the National Builders' Association is going to accomplish in the future depicted in glowing terms to you, and having combined with all this the many good things that the good landlord of this tavern, as it was described this evening, has showered on you, I have felt that that is about all that any reasonable convention ought to expect. (Laughter.) Now, gentlemen, if you expect any more—I make that point for a purpose—if you expect any more, I say, than that, you will have to do with me as with my friend who has just taken his seat—give me an opportunity to look up at least a column of the city directory to find out the names of the prominent citizens so I can tell you about them. I have been called upon, gentlemen, for the purpose, as your chairman has stated, of responding to the toast, "The National Master Painters' Association," and I feel that I am entirely unqualified to do that subject justice, and would be more than pleased could we have with us tonight the man whom we are proud to call, "father of the National Painters' Association," and the man who three years ago in the city of New York, in starting that association had not four or five hundred enthusiastic gentlemen around the festive board, but simply two men, two men who called a national convention of the master painters in the city of New York, and issued some fifty thousand circulars, and spent a good deal of his own time and money in seeing that they were posted, went to New York, and not on a railroad pass, notwithstanding it was before the inter-state commerce bill (laughter)—went to New York City and called his convention, gentlemen. When he got there he had a room, seven by nine, in one of the ordinary hotels there, and the convention met. (Laughter.) And they found, after the business of the convention had been adjusted nicely and the banquet had been gotten through with (laughter), and it came to the election of officers, that they were one man short to fill the offices. (Renewed laughter.) Now, gentlemen, you have had a great deal said to you tonight about the wonderful things you are going to do in the future, and of course you will do it, because you have started out under the most favorable auspices. You have had a very large first convention; and I want to say to you, in the face of the fact that that good and great man—to the ordinary painter, at least—who called that convention in the city of New York—it was three men who met and held the convention and had a banquet. (Laughter.) In one year from that time the National Master Painters' Association met in the city of Chicago, and they had 230 delegates to that convention. (Cries of "Good," and applause.) All things that are well started in Chicago, except dramatic combinations, take well in the East. (Laughter.) The National Master Painters' Association, in their great wisdom, after meeting in Chicago and predicting of the good things to follow, after the manner of you gentlemen today—and they seemed to be well pleased—decided that notwithstanding the East one year previous to that time had refused to send a single man, they would try the City of Brotherly Love, and they decided to hold their next convention in the city of Philadelphia. In last July the National Master Painters' Association had, at their second annual convention in the city of Philadelphia, 562 delegates. (Loud applause.) Then, in order to try and impress on the minds of the great metropolitan city of New York, which had previously turned a cold shoulder on the Master Painters' Association, they decided to hold their next annual convention there, which will be held in July, in the city of New York; and being on the inside and not talking for the purpose of making a large showing at the banquet, for the reason that I am secretary of it and know the inside workings of it, I can say to you, gentlemen, tonight, that within three years we have succeeded in enrolling under the banners of the National Master Painters' Association 1,400 members. (Applause.) And I want to say to you, as has been more ably said than I can tell you, perhaps, that in the name of the 1,400 members, and as the representative of the president, Mr. Berger, of Pittsburgh, who was, I am very sorry to say, unable to be with you tonight, that we desire to say to you on behalf of the officers of that association and the 1,400 members contained therein that we will be proud and very pleased to act as an auxiliary and companion of the National Builders' Association (loud applause); that we are today agitating some of the questions, or endeavoring to, that you gentlemen have talked about in your convention, and among others the apprenticeship system and the training school question. We have taken considerable interest in that, and I say that in all those things, and in all things that will have a tendency to bring about a better condition of affairs, in all things that will have a tendency to soften down the asperities between the employer and the employé, the National Master Painters' Association will second your every effort and lend you all honorable aid in the prosecution of the same. (Applause, and cries, "Good.")

President Tapper then called upon Mr. W. L. B. Jenney, of Chicago, to speak about "The Architect," and that gentleman responded, as follows:

Mr. President and Gentlemen.—Seeing myself surrounded by so many contractors and architects, suggests the last words of the Two Dromios: "Now let us go hand in hand, not one before and one behind. (Great laughter.) If there is any two that should go hand in hand, it is the contractor and the architect. What would the architect do without the contractor, upon whom to shoulder all his shortcomings? (Laughter.) Upon what could he rely to find out all the error that had crept into his design, and to notify him before any expense had been incurred? And on the other hand, how could the contractor do any business at all without the architect? When the owner finds fault with him he has only to say, "It is just like the specifications" (laughter), though it is true he has not seen the specifications since he got the contract, and he don't expect to, until he reads them to make out a bill of extras. (Renewed laughter.) And how will he get his bill of extras allowed except by arguing the architect into the belief that he is entitled to every one of them? He cannot get any pay without the architect's certificate, and there the architect has him. But there is no one more than the architect that knows how to appreciate the value of the intelligent, skillful and painstaking contractor. (Applause.) We see here tonight representatives of the elite of all the building organizations, from the quarryman who furnishes the foundation stone, the mason who lays the first brick, to the decorator who puts on the finishing touch, and with his best bow ushers the owner into the edifice we have all assisted to construct to completion—we must not even forget the plumber, that good-natured butt of all the jokes,—he never gets mad. He has his revenge when he brings in his bill. (Great laughter.) Dr. Smith tells the story of a man who called upon him, complaining of insomnia, who worked hard all day, and came home and went to bed, and instead of going to sleep, he would toss and roll about, and think over, and over, and over again of all he had done during the day. "Why, what is your business?" says the doctor. "I'm a plumber." "Oh! that accounts for it. Why, it is a minister you want, not a doctor. Go, and see a clergyman." (Great laughter.)

But, gentlemen, there is more expected of this great National Association than mere jokes and a good time. There are great social, national questions that you are called upon to solve; among others, that of apprenticeship. It has already been spoken upon. The apprentice system is surrounded with so many obstacles, and the appropriations allowed by the nation so ridiculously small, that practically there are no apprentices, and the question is, where are we, and where are those who come after us soon to get the skilled labor necessary to carry on our works that are every year increasing in importance, demanding more skill and more intelligence? A wealthy gentleman of New York established a free school to teach the trades. Now, I appreciate all that has been said about the manual training schools; they are admirable; but we want something more. It is not in the manual training school that we raise journeymen, even. We want an apprentice school. This gentleman tried to establish one, and it was no sooner pronounced a complete success than the unions became alarmed, took away his teachers by forbidding any members of their unions to teach in his school. Now, what this man was enabled to do in one city, you, with your power and influence can establish in every city and every large town in the land. (Applause.) If the trades unions are in the way, they must step to one side. It is not for long that any society, however powerful, can be allowed to block the wheels of progress. (Applause.) I know that they are very touchy just now, and allow themselves to be burlesqued by tramps and socialistic leeches that attend them. There is a story of a night burglar that tried to enter a dwelling by picking the front-door lock. It was the Yale. He left in disgust, with virtuous indignation almost choking him, but he was able to articulate, "the man that will put such a lock as that on a door insults the workman" (laughter), the glorious institution of American liberty is going to the devil." (Loud laughter.) Now, gentlemen, it is no part of our policy to lower wages. On the contrary, we want to make skill and intelligence worth working for; but above all let us remember that we are doing business on American soil, under American laws, and with all the advantages of American institutions. (Applause.) Let us forget all accidents of birth, and remember only that now we are but Americans. (Great applause and cries of "Good.")

There being persistent calls for Mr. A. J. Campbell, of New York, that gentleman responded in the following remarks:

Mr. President and Gentlemen.—You will have to excuse me, notwithstanding my heart is wrapped up with this cause, and I have the same degree of enthusiasm and feeling about it that you have, I am not in condition to entertain or amuse you tonight. I was not out with Sayward last night either. (Laughter.) I have been so ill today that I was obliged to leave the convention this morning before it closed, and very much to my regret, in order to lie down to rest my painful head. I have endeavored very hard today to get myself in condition so as to be present tonight, and I can assure you that I would not have taken a hundred-dollar bill and missed it. I have enjoyed this occasion as well as any I was ever present at in my life, and I am nearly one hundred years old. (Laughter.) Some of you laugh as if you did not believe that. I cannot help, however, while you have so kindly called me out, and stood me up, making a little reference to my former knowledge of Chicago. It is an old saying that the spaniel licks the lash that whips him, or words to that effect. I first put foot in Chicago thirty years ago this year, 1857. All I had in the world then was a wife and six children and \$2,000, (laughter), a little furniture and I came to Chicago, or rather, I sent a confidential representative to Chicago to start a little enterprise in which I thought I saw a good opportunity. I saw a large field for the growth of the business which I introduced here, and it seemed to go on flourishing and successful for a time. After a little it did not appear to go quite so well. All I had up to that time in my life I had put here, except those babies. (Laughter.) I received a letter one day in this laconic shape: "This place is busted and I am off." (Laughter.)

That is all there was of it. I sent another representative here to look into the matter. He came and saw, but he didn't conquer much. (Laughter.) He found that everything was gone but one work-bench worth \$2, and about \$700 or \$800 of unpaid debts standing. (Laughter.) I wrote to him, "Start her off again and we would do the best we can." He saw the people to whom I was indebted, gained a little time, and we buckled on again, and inside of two years the business was flourishing, and he had as much money as I had lost by it. (Laughter.) It was not a very great while before justice surrounded him and had him in jail. (Renewed laughter.) I felt a little discouraged, but I sent another representative and started her off again. Then, in 1857, I came here to overlook and grant myself the first opportunity that I had got in my life to get so far away from home. I was encouraged, because in those days of my youth I was buoyant and easily encouraged. I undertook some things in those days that I could not well do now. I looked around, feeling encouraged, and made new arrangements, hired a building on Dearborn street, on the block where the Tremont House was, and I stayed here some little time until I got the machines all running to my satisfaction. This Chicago at that time was down in the mud, and the first movements were initiated to raise it up, and the building that I occupied on Dearborn street was the very first building that had the jack-screws under it and raised up, and in front of my place we erected a platform steps. That was the beginning. I came here a year or two after that, and Chicago was the most woe-begone looking place I had ever seen. You had to run up and down the steps, and up and down every moment. But to return to the remark that I made first, while my business enterprise here turned out in the end to be an entire failure, because it was in the hands of other people, some of whom had erected houses out of the profits made from it, and got into jail, too, and did all sorts of things that were not very good, and I never got anything out of it—finally sold it out for a few hundred dollars and a few notes which were never paid (laughter)—notwithstanding all that, I like Chicago. (A voice: "Good!") I think Chicago is one of the greatest wonders in this world. When I put my feet here in 1857, when she was down in the mud, she had 60,000 inhabitants, and here I find her today, thirty years after, elevated in every sense of the word, with nearly a million inhabitants—that is, with a moderate deduction. Isn't it wonderful? To my mind there isn't anything on earth like it.

Now, a word upon our business—and I have been, in the course of my time in a great many conventions. While I, perhaps, don't look as old as I am—people tell me that I do not, at all events, and I do not feel very old, only when I get these attacks of neuralgia. I have never experienced greater pride in assembling with my fellow men than I have experienced by being called honored as a delegate in the first convention of the National Builders' Association. (Applause.) I have thought of it several times since I have been here, and that I would like my successors to know that I was one of the delegates to the first convention of an institution that I prophesy will grow to grand proportions. I have attended a good many conventions, have been more or less in politics for about forty-five years, and I assure you, having seen conventions of nearly all kinds, that I have never seen together a better representative lot of men than was in this convention today and since its organization. (Applause.) For respectability and intelligence it cannot be excelled, outside of a Presbyterian or Methodist convention (laughter), by any other. Whether all we have done is the best that could be done, time will tell. The good advice that our worthy president has given us tonight, as to what we must do, we should take to heart and take home with us. Our little humble delegation from New York City intend, if possible, to rejuvenate the institution existing there called an Exchange. We have three hundred members and \$20,000, and I believe that about half of the members think more of the \$20,000 than they do of the business of the Exchange. (Laughter.) We propose to rejuvenate that institution and get it out of the old ruts in some way. I have exerted myself very materially in that direction, some three years ago was elected president, and upon the fact that I had previous to that inaugurated a plan whereby we could erect a property in New York that would be a credit and an honor to the building interests and to the city of New York, and to the builders as a representative mechanical body; and was proceeding with the matter very favorably. We had some \$60,000 worth of shares subscribed, when some of those marplots that exist in this world, God bless them, set to work and surreptitiously organized a plan by which they upset the whole scheme. Now, when the matter was suggested that we ought to have a meeting of the convention in New York, I said, "No, for God's sake, not yet." We don't want you there until we have got a decent place to show you. Our Exchange is a little side-pocket opposite a graveyard. (Laughter.) It is no credit to us at all, and I hope that I shall live long enough to see a grand national assembly of this association in New York, and that we will have a decent place to show you.

I am very much obliged to you, gentlemen, for your kind attention, for you seem to have listened to me with a good deal of attention, and I don't know why, for I know I have not said anything very interesting, but still I am very much obliged to you, and I know that I have proceeded to an extent that I now begin to weary you.

President Tapper: Gentlemen, before we adjourn tonight I would like to hear from Mr. Harry Donovan, of Chicago.

Mr. Donovan: *Mr. President, and Gentlemen of the National Association of Builders*,—I came here tonight with my heart full of pride, to gaze upon an assembly of American gentlemen who are gathered here to elevate the muscle as well as the brain of America, and to see in this city which owes so much to the American builder, an association formed which, from the lips of its president, I hear is not only to elevate the building craft, but to cultivate American patriotism. (Applause.) And as a Chicagoan, I thank God that in this new hub of the universe the American Republic has seen born a grand association of hard-fisted, strong-hearted, high-minded and intelligent men, who declare in their platform that they believe in educating the American boy to use his hands and brains (applause); that they believe that the days of weak and effeminate men in

this country has come to a pass; that the days when it was ashamed to educate your boys to a trade are long gone in the distance, and in the future we will not have to import pauper labor from Europe to work upon our public works (applause), and that the same republic which is strong in the field when it marches forth for glory or for liberty can show to the civilized world that the greatest republic that ever lived has the pride and the manhood and the honor to educate its sons to manly trades and manly occupation. (Applause and cries of "good.") And I have heard from the utterances on the floor of your society and from the utterances of the president of your national association, sentiments of patriotism that I thank God that I have heard. (Applause.) They are sentiments that are worthy of a collection of gentlemen who are not drawn together on account of any party consideration or any trifling sentiment, but who are drawn together without regard to creed or to religion, to a position in the politics of the land, to any difference of opinion upon the tariff or any other public question, but are drawn together as representatives of the bone and sinew, the wealth and the intelligence of the republic, to better the condition of their fellow men, irrespective of north and south, or east or west. (Great applause.) Gentlemen, the American Republic in the birth of your association enters on a new life. If public institutions are created under your standard in every great city, to teach manual training, you will educate the boy to be a man, wherever he is thrown in the world, and if he wants an example of what he can be by cultivating his muscle and the hands that God gave him, let him look upon the successful galaxy of American business men and gentlemen who have won their common places by their success in life, and who today have christened such an association as yours. (Loud applause.)

BANQUET TO VISITING LADIES.

While the entertainment of delegates was occupying the attention of the members of the Entertainment Committee, the ladies accompanying visiting delegates were not forgotten. A special committee was placed in charge and the wives of Chicago members called in. Theater and dinner parties were given, one of the most notable and enjoyable being by Mrs. P. B. Wight at the Union League Club. But it was upon the evening of the banquet that the most elaborate entertainment was given. This was in the form of a dinner in one of the large parlors of the hotel. The table was tastefully decorated with flowers, and a neatly printed menu card was placed at each plate.

The guests present were: Mrs. J. J. Tucker, of New York, who occupied the place of honor at the head of the table; Mrs. James Roche, of Detroit; Mrs. J. A. Jarvis, of New York; Mrs. F. F. Beck, of Sioux City, Iowa; Mrs. J. A. Emery, of Boston; Mrs. E. E. Scribner, of St. Paul, and Mrs. J. G. Bogert, of New York.

The lady hosts were: Mrs. Joseph Downey, Mrs. W. H. Crannedge, Mrs. F. C. Schoenthaler, Mrs. T. C. Courtney, Mrs. A. W. Murray, Mrs. Col. M. W. Powell, Mrs. P. B. Wight, Mrs. W. G. Anthony, Mrs. W. E. Frost, Miss Cornelia Benner, Mrs. J. B. McGrath, Mrs. E. E. Swiney, Mrs. J. G. McCarthy, and Miss M. E. Sullivan.

No speeches were made, but a certain amount of conversation was indulged in. As only ladies were present, the proceedings cannot be accurately reported. It is understood, however, that the principles laid down by the convention were fully discussed. Nothing was said about the frequent committee meetings, which were the alleged cause of the delegates keeping late hours, and the whole affair was so enjoyable that the fair visitors voted themselves necessary adjuncts to all well-regulated conventions, and will be sure to be found in attendance on the 1888 convention.

The visiting ladies presented to each of their hosts a corsage bouquet of jacquemot and La France roses. One feature of the dinner was the marked absence of wines, which were omitted at the express request of the guests.

BANQUET TO VISITING PAINTERS.

The Chicago Master Painters' Association on Wednesday evening gave a dinner at Kinsleys to the visiting painter delegates and the press. There were present H. J. Milligan, M. J. Sullivan, P. M. Almini, J. G. McCarthy, J. Nelson, George Barry, of Chicago; M. H. Godfrey, R. C. Miller, of Pittsburgh; James Roche, of Detroit; Byron T. Collingbourne and Stewart Murray of Milwaukee. The press was represented by C. E. Chapin, *Tribune*; W. L. Cossar, *Times*; James Carey, *Inter Ocean*; R. C. McLean, *INLAND ARCHITECT*, and H. L. Gay, *Budget*. The dinner was one of entire goodfellowship, and bore out the reputation justly given the Chicago master painters for being princely entertainers. Mr. Collingbourne in his usual inimitable manner spoke of the attractiveness of the Cream City, and introducing his friend, Mr. Murray, stated that he was more interested in transportation than painting. He proved a delightful acquaintance, and did much to confirm his friend's praises of Milwaukee and its people. Mr. Carey entertained the guests with a poetical recitation upon the "White Fast Mail," and the guests voted this dinner one of the best arranged and enjoyable they ever participated in.

Association of Alabama Architects.

A MEETING of the architects of Birmingham, Alabama, was held in the offices of Messrs. Sutcliffe, Armstrong & Willett, 115 Twenty-first street, Birmingham, on March 9, 1887, at 8 o'clock P.M. There were present: Mr. Edouard Sidel, in the chair; Messrs. Oscar Haupt, W. H. Willett, John Sutcliffe, and Mr. Maury, of Louisville (as a visitor).

On account of the somewhat small number of the architects of Birmingham present at this meeting, it was resolved to adjourn until Saturday evening, March 12, and also that circulars be issued giving notice to the profession of such adjourned meeting.

The second meeting of the architects of Birmingham, Alabama, was held in the offices of Messrs. Sutcliffe, Armstrong and Willett, on March 12, 1887, at 8 o'clock P.M.

There were present: Miss Smith, Messrs. W. S. Smith, E. Sidel, F. H. Rousseau, A. J. Armstrong, H. B. Wheelock, W. H. Willett and J. Sutcliffe.

On motion, Mr. Sidel was appointed chairman.

After Mr. Sutcliffe had read several communications received from J. F. Alexander, of Indiana, secretary of the Western Association of Architects, B. G. Chisholm and Messrs. Haupt and Millard, it was moved by J. Sutcliffe and seconded by A. J. Armstrong,

Resolved, That we, as representing the architects of the State of Alabama, hereby agree to form a body or corporation to be called the Alabama Association of Architects, and that the said association, when formed, be affiliated with the Western Association of the United States.

The motion was carried unanimously.

It was moved by W. S. Smith, seconded by A. J. Armstrong, that in all action taken at the meetings of the association, strict parliamentary usage be followed. The motion was carried.

It was moved by F. H. Rousseau, seconded by W. H. Willett, that a committee be formed for the purpose of inviting the assistance and coöperation of the architects of the rest of the state, in forming and carrying on the work of the association. The motion was carried.

The following were appointed to serve on this committee: Mr. H. B. Wheelock, Miss Smith, Mr. A. J. Armstrong.

It was resolved to appoint officers of the association to serve for a period of three months from the date of the present meeting.

It was moved by Mr. Armstrong, seconded by Mr. Rousseau, that Major Charles Wheelock be president. The motion was carried.

It was moved by Mr. Sutcliffe, seconded by Mr. Armstrong, that Edouard Sidel be vice-president. The motion was carried.

It was moved by Mr. Smith, seconded by Mr. Rousseau, that John Sutcliffe be secretary. The motion was carried.

It was moved by Mr. Rousseau, seconded by Mr. Armstrong, that Miss Sallie Smith be treasurer. The motion was carried.

It was moved by Mr. Rousseau, seconded by Mr. Smith, that the following committees of the association be appointed:

- a. To draw up a code of rules and by-laws for the association.
- b. To frame a schedule of prices to govern the charges to be made to clients.
- c. To design a motto and badge or coat of arms for the association, and that every architect in the city be asked to furnish any data or information which he may have in his possession, which shall appear to him of advantage to any of the committee. Carried.

The following were appointed on the above committees:

- a. Major Wheelock, Messrs. Smith and Sutcliffe.
- b. Messrs. Sidel, Maddox and Rousseau.
- c. Messrs. Sidel, Haupt and Willett.

It was moved by Mr. Smith, seconded by Mr. Armstrong, that the meetings of the association be held fortnightly, on Saturdays, at eight o'clock in the evening, and alternating at the offices of the various members of the association, for the present. The motion was carried.

On the invitation of Mr. Sidel, it was decided to hold the next meeting at his offices, on March 26.

It was moved by Mr. Smith, seconded by Mr. Willett, that a standing committee be appointed for a term of three months, to endeavor to arrange that the meeting of the Western Association be held in Birmingham, in 1888. The motion carried.

The following were appointed on this committee:

Major Wheelock, Messrs. H. B. Wheelock, Armstrong, Rousseau and Chisholm.

The secretary was instructed to forward a report of the proceedings to the INLAND ARCHITECT, and the meeting adjourned, to meet at the office of Edward Sidel, March 26, at eight o'clock P. M., to which all the architects in regular practice in the state are invited to be present.

Our Illustrations.

Railway station, Kewanee, Ill.; Burnham & Root, architects, Chicago. Sketches for Emmanuel church, Rockford, Ills.; E. Burling and F. M. Whitehouse, architects, Chicago.

Accepted design for the Carnegie free library, Allegheny, Pa.; Smith-meyer & Pelz, architects, Washington, D. C.

Details—Bracket of a chandelier, late Gothic panel, late Gothic spandrel, chair arm, cast-iron grille, leg of table from Brunswick castle, "Comstock" del.

Residence for J. C. Caskey, East Saginaw, Mich.; George Beaumont, architect, Chicago. The dining room, staircase, reception hall and vestibule will be finished with red oak, and the library and drawing room with red birch. The bedrooms are well supplied with toilet and dressing rooms, all of which will have clear white pine finish, the bathrooms being finished in mahogany. The very best of Henry Huber & Co's sanitary appliances will be used, and every precaution has been taken to make the house thoroughly dry and healthy.

PHOTOGRAPHURE PLATES.

(Issued only to subscribers for the Photographure edition.)

Three houses for W. H. Burnet, Kenwood, Ill.; S. S. Beman, architect, Chicago.

Residence for Wayne Neff, Cincinnati, Ohio; Bruce Price, architect, New York.

Residence for Mrs. Ellen M. Thorne, Kenwood, Ill.; M. L. Beers, architect, Chicago.

Store and flat building for I. H. Mack, Cincinnati, Ohio; Oliver C. Smith and Walter R. Forbush, architects.

The New Auditorium building, Chicago; Adler & Sullivan, architects. This illustration will appear if the contracts for the building are let before publication day, if not it will be held till next issue and replaced by residence for Sidney A. Kent, Chicago, Burnham & Root, architects.

New Publications.

MONOGRAPHS OF AMERICAN ARCHITECTURE. Boston: Ticknor & Co. For sale by A. C. McClurg, Chicago.

Very different in character from the above is the series of monographs now being issued by Ticknor & Co., of Boston. The Comstock series presents in each number in reduced scale complete specifications and drawings for the erection in workmanlike manner of a first-class building. While the building presented in the first number is from the studio of Mr. Bruce Price, and in point of style and merit up to his high standard, yet its publication in such form is addressed rather to the practical than to the artistic side of the architect's work. It will give the young architect a hint of the essentials of high-class work, and incidentally may lend him inspiration in other matters than specifications and sections. The Ticknor series, on the other hand, is addressed solely to the artistic side. Each number presents exterior and interior views, with an occasional plan of one or more representative buildings, by representative American architects. In so far as it is addressed to the architectural profession its value depends on the architect. The architect who is abreast of the day has seen these buildings, or has gained his inspiration from the sources which inspired their designers; is ready by study to do good work; and realizes that photographs and gelatine prints cannot make an artist of any man. To such an one the series falls, not into the working library, but into the list of books immortalized by Charles Lamb in his essay on the books which no gentleman's library should be without. To the architect who has not seen and studied what the old and new worlds have to offer, or who is not sure of his own artistic sense, these monographs offer a source of inspiration of a more immediate nature, and may most appropriately come in as a part of his working library.

But this series is addressed to a wider class than the profession, and in this wider reach, we apprehend, will be found its highest value. We refer to the influence that such a series may exert in bringing the best work to the notice of the public generally, and thus educating popular taste in a much needed direction. Not to overlook the bad taste daily displayed in matters of literature and music, in painting and decoration, we incline to the belief that in no other direction are the American people guilty of such general widespread sad taste as in judgments upon architectural works. We accordingly welcome every means which, by familiarizing the public with the better, may lead them to condemn the worse.

The monographs thus far published are:

- No. I. Harvard Law School, H. H. Richardson.
- No. II. The State Capitol, Hartford, Conn., Richard M. Upjohn.
- No. III. The Ames Memorial Buildings, North Easton, Mass: 1. Town Hall; 2. Library; 3. Gate Lodge; 4. Railway station. H. H. Richardson.

- No. IV. The Memorial Hall at Harvard. H. H. Richardson.

The buildings and their designers are well known to our readers, and need no comment from us. The Ames group at North Easton will doubtless stand as the most distinctive and characteristic of the late Mr. Richardson's creations, and as such give a special interest to No. 3 of the series.

The monographs are put up in portfolio form, the gelatine plates are finely executed, and the fact that their publication is in connection with the *American Architect* is ample guarantee of the excellence of the workmanship.

Georgia Marble.

GATHERING from our exchanges that this variety of marble is attracting considerable attention as a building stone, and having a knowledge that it has been used to some extent in Chicago, a lull in the daily press of business holding out an invitation to visit some of the localities in the city where it has been utilized, a representative of the INLAND ARCHITECT was sent out to "take notes and print them."

It is undoubtedly within the knowledge of architects and builders that this variety of marble is quarried from three distinct strata, each differing from the other in color and shades of color, although not in quality. One yielding a white and black variety, varying from a heavy clouded down to mottled and dark and light hues, similar to granite grays; another a reddish variety varying through hues from light pink to copper-colored shades; another a white stone of great purity. Also that the crushing strength of the marble, by reported government tests, show it to be equal, or nearly equal to granite (395,800 per square inch), and by chemical analysis, to be nearly pure carbonate of lime (97.32 per cent). Also it is claimed for this marble that it is impervious to moisture and absorption.

Unbiased by these reports and claims our representative presents the results of his observations and inquiries.

The first point of observation was the new residence of Mr. Geo. A. Weiss, No. 540 North State street, undergoing the finishing touches. This building is constructed of the light pink variety, with frequent markings in the ashlers of green. We venture to say this is one of the finest appearing stone facades in Chicago. The elegant carvings, notwithstanding its hardness, that adorn the facade, show beyond dispute that the stone works kindly under the chisel.

The next point of observation was the Adams Express Building, Nos. 185-189 Dearborn street. This visit was with a view to see the stones adaptation to interior work, as in this instance it has been combined with Italian marbles to create effects. The entire rotunda is treated in this manner as well as the floors, main stairway and the wainscotings. The effects are very agreeable and are suggestive of the possibilities in its use.

The next point of observation was D. K. Hill's residence, in course of construction on Michigan avenue and Twenty-sixth street, which is built entirely of the dark gray variety, and the next, S. S. Beman's two handsome dwellings on Calumet avenue, near Thirty-first street, one of which is constructed of the light gray variety and the other of the dark pink, ornamented with copper-colored pillars, sills, etc.

Although but four buildings were visited, enough was seen to show the opportunities presented to architects for creating novel and artistic effects in the utilizing this stone.

Mosaics.

THE State of Texas, which is about completing its new capitol, will cover it with copper, using about 800 squares. The Cincinnati Corrugating Co., of Cincinnati, Ohio, has the contract for this copper roof, which will be, perhaps, the largest amount on a single building in the United States.

WHAT is the matter with the profession in Iowa? W. A. Hawley, of Marshalltown, has located at Pittsburgh; F. M. Ellis, of Marshalltown, at Omaha; W. F. Hackney, of Des Moines, at Kansas City (branch office). W. L. Plack has gone to Philadelphia, and J. S. Blake has gone to Omaha.

THE recent quarrying, cutting and polishing by the Syenite Granite Company, of a granite shaft 42 feet 6 inches long, by 4 feet 6 inches in diameter, is illustrative of the use and possibilities of granite as a building material, particularly where large stones possessing great strength are required, and in quantities.

THE partnership of the firm of Wm. M. Dee & Son has been dissolved, and W. E. Dee has established himself at 160 La Salle street, as a licensed sewer builder for Chicago and suburban towns. If long experience in the business, and a wide acquaintance in the building trade is any guarantee of success, it can safely be predicted for Mr. W. E. Dee.

THE Raymond Lead Company, of Chicago, have recently contracted to furnish their patent compressed lead sash weights for Mrs. Mark Hopkins' palace, Great Barrington, Mass.; the Equitable Life Insurance building, New York; the Phoenix Insurance building, Chicago, and have received large orders from Washington, D. C., and Cincinnati, Ohio.

FREDERIC TUDOR (and not as was printed recently, Henry Tudor) is the name of the steam heating firm of New York and Chicago, who have done a large amount of work in Chicago, where a list of the more important buildings fitted with their excellent system was given. Their Chicago representative reports a fair amount of work already in sight for the coming season.

MESSRS. FROST & ADAMS, of Boston Mass., are introducing a novelty that is of interest to architects, civil engineers and draughtsmen. It is called the "universal ruler and section liner," and is capable of drawing accurately and uniformly, parallel lines, curved and irregular work, parallel circles, shading lines—in fact all lines common to drawings made by each of these professions. The device carries with it all the evidence of simplicity and durability.

THE Ainsworth pipe and boiler covering appears to be meeting with a general appreciation. At the Deering works, at Deering Station, where other coverings have failed to give satisfaction, this covering has been adopted over the entire works. It has also been adopted by the Chicago and North-Western railway for their office building, the A. T. Ewing building, corner of Franklin and Adams streets, the Fairbanks Canning Co., the L. C. Huck Maling Co., the Weiss Elevator, St. Luke's Hospital, and other prominent concerns.

A CIRCULAR has been received to the effect that Architects Van Leyen & Preston, of Detroit, have formed a copartnership, and opened an office at 100 Griswold street, in that city. Mr. Edward Van Leyen, who has been head draughtsman in one of the leading architectural offices in Detroit, will give his principal attention to the office. Mr. Charles Preston, having been connected with leading firms of Cleveland, Ohio, and other cities, and devoted most of his time to superintending, will give his principal attention to outdoor work generally. The new firm is deserving of success.

A BILL has passed the Wisconsin legislature which provides that any architect who shall draw plans for, or superintend the construction of any hotel, church, school house or building to be occupied by wage-earners, and not supply such building with fire escapes and swinging doors, shall be fined \$25 for the first offense and \$100 for each subsequent offense; and any person or persons constructing a building on defective plans, without outward swinging doors, shall be fined \$100. Nothing seems to be said about the owner's responsibility in the matter, or about his cheapening his building sufficiently to cover the cost of fire escapes.

THE sales of boilers made by The Babcock & Wilcox Co. during February 1887 include: F. Probst & Co., New York City (for export), fifth order, 82 horsepower; Wise Bros., Baltimore, Md., 102 horsepower; J. & R. Meily, iron-masters, Lebanon, Pa., 208 horsepower; Lickdale Iron Co., Lickdale, Pa., 450 horsepower; Forest City Sugar Refining Co., Portland, Me., second order, 140 horsepower; Columbia Rolling Mill Co., Watts, Pa., 136 horsepower; Mahoning Rolling Mill Co., Danville, Pa., second order, 125 horsepower; Arlington Mills, Lawrence, Mass., 2880 horsepower; Gordon, Strobel & Laureau, limited, Philadelphia, Pa., third order, 45 horsepower; The Alabama & Tennessee Coal and Iron Co., 1872 horsepower; Judson Manufacturing Co., San Francisco, Cal., second order, 292 horsepower. Total, 6,332 horsepower.

A RECENT contributor to the Chicago *Herald* has written as follows: "For thoroughness of equipment, precision of time, attention to the comfort of the passenger, there is no road so satisfactory as the Burlington. Run on its line; a station and a time-card tell the hour. It shows everywhere the effect of masterful, practical management." Had the writer added: Through trains, equipped with dining cars, through sleepers and attractive coaches, are run over its lines between Chicago, Peoria, or St. Louis, and Denver, Lincoln, Omaha, Council Bluffs, Kansas City, Atchison, St. Joseph, St. Paul and Minneapolis—had this one sentence been added to those above quoted, the writer would have unconsciously given a complete epitome of the reasons why the Burlington Route, C. B. & Q. R. R., is so extensively patronized by all classes of travel, not only to the points mentioned, but via its lines to the Rocky Mountains, the resorts of Colorado, California, and the Pacific coast, as well as to the City of Mexico, Manitoba, Portland, and Puget Sound points.

MR. JOHN A. COOPER, formerly secretary and treasurer of the Union Brass Manufacturing Company of Chicago, has purchased of that company

its department for the manufacture of architectural and miscellaneous brass goods, retaining the present shop, Nos. 91 and 93 Ohio street. Mr. Cooper was for twelve years with the Pullman Company, latterly in the construction department, where his practice in the details of the ornate interiors of the moving palaces will serve him in good stead in the new enterprise. He has associated with him the former superintendent, Mr. John D. Duffy, well known to the architectural world as superintendent of the construction of some of our finest buildings. Their references speak for them most practically in the work done at the Merchants' Loan and Trust Company's bank, that of S. A. Kean & Co., the Commerce building, the Phoenix building, the Union League Club-house, the Northwestern Mutual Life Insurance Company's building at Milwaukee and many others. The style of the new concern is the Union Brass Architectural Works, and we commend them cheerfully to the profession.

RECOGNIZING the want in the market of a laundry tub that should not, from its costliness, be impracticable except in the most expensive buildings, and that would obviate the unwholesomeness and annoyances, such as leakage, etc., of the wooden boxes commonly used and called laundry tubs, Messrs. McShane & Co., the well-known dealers in plumbers' supplies, of Brooklyn, New York, have invented and put upon the market a stoneware laundry tub, which they call the "Crown Stoneware Laundry Tub." The success of their enterprise has recently forced them to occupy new and larger quarters, wherein they are able to produce one hundred of these tubs daily, using up ten tons of material per day. They employ a large force of men, manufacturing, packing and shipping these wares to all points of the Union. The material is a special composition of their own, and which they put to every conceivable necessary test of strength and durability, such as heat and cold, concentrated lye, washing soda, and in every case without the slightest injury to the tubs. Messrs. McShane & Co. claim for their goods strength, durability and cleanliness, at a cost no greater than that of a properly made wooden laundry tub.

Synopsis of Building News.

Akron, Ohio.—Architects Weary & Reamer report work with them booming, though nothing doing in Akron. Have prepared plans for a large court house, jail, and sheriff's residence in Pickaway county; cost \$40,000; jail and sheriff's residence for Huron county; cost \$30,000; Children's Home for Summit county; cost \$35,000; church in Apple Creek; cost \$8,000.

Albert Lea, Minn.—Architect Dunham, of Burlington, Iowa, is preparing plans for court house to cost \$60,000.

Austin, Ill.—Architect Fred Schock has prepared plans for a library building which will contain, in addition to the library room, a spacious club and reception rooms.

Bloomington, Ill.—Architect George Miller is preparing plans for additions to the convent on Chestnut street. A large wing is to be added and the whole building raised to three stories with slate roof.

Boston, Mass.—The boards of directors of the Boston & Maine, the Eastern, the Boston & Lowell and the Fitchburg Railroads have under consideration plans for the construction of a mammoth union depot. The cost of the structure proposed will be \$5,000,000. The plan which it is thought will be most favorably considered contemplates the building of the station in Haymarket square, upon the site of the present Boston & Maine depot. It is proposed to run sixteen tracks into the building, making room for two hundred passenger cars made up into trains under the roof. The design is similar to that of the Pennsylvania depot in Philadelphia. The tracks would be elevated so as to cross the intervening streets at a height of fourteen feet. To accomplish this it will be necessary to do away with the drawbridge on the Boston & Maine over Millers' river, for which a proposition will be brought before the legislature. This bridge is not much used, not more than one vessel passing through it in three days, but it brings to a stop two hundred and twenty-five trains a day.

Buffalo, N. Y.—Architect E. H. Kelly reports: Repairs and additions to 369 Michigan street, Mary Darby owner; to cost \$14,000; J. S. Spencer, contractor. Store and flats and hall, for J. R. McDowell, corner of Main and Cooper streets; cost \$7,000; J. S. Spencer, contractor. Brick dwelling for Mary Wetmore, 149 Franklin street; cost \$13,000; H. T. Smith, contractor. On Music Hall lot, Franklin street, dwelling for L. Marvin; cost \$12,000; contractor, J. Driver.

Chicago, Ill.—Architect George Beaumont reports: Four brick residences on Lake avenue, west of Forty-third street, for W. A. Lowden; cost \$25,000. Three brick and frame residences in Lake View for Mrs. Annie Schoen; cost \$10,000. One brick and frame residence for John Pedgrift; cost \$5,000. One stone and frame residence in East Saginaw, Mich., for J. C. Caskey; cost \$10,000; contracts all let. Preparing plans for alterations and additions to residence in Lake View for B. F. McConnell; cost \$4,000.

Architect Andrew Spence has prepared plans for five dwellings, four story, brick with brownstone trimmings, 18 by 45 each; and five-story brownstone flat building, to be erected on Sixty-fourth street, for Prof. Smith; to cost \$90,000. And on the boards, plans for five story brownstone flat building, 25 by 75, on Ninety-eighth street, for J. H. Sommerhays; cost \$25,000.

Architect W. W. Boyington reports: Plans three story and basement flat building, 30 by 80, pressed brick with terra-cotta trimmings, to be erected on Michigan avenue, near Twenty-fourth street, by H. H. Blake; cost \$15,000; contract let. Three-story and basement residence, 25 by 75, pressed brick and brownstone trimmings, for J. B. Harris, at Michigan avenue and Thirty-sixth street; cost \$15,000. Three-story store and flat building, 25 by 60, pressed brick and terra-cotta, location Center and Fremont avenues, for S. T. Johnson; cost \$7,000. Three-story and basement addition, store and flats, 44 by 92, pressed brick and terra-cotta, location Englewood, for J. Ingram; cost \$18,000.

Architects Meredith & Bussell, who have just located their office at room 88, No. 159 to 161 La Salle street, have prepared plans for a two-story and basement frame cottage, 28 by 48, to be built for Mr. S. B. Meredith, on Sheridan avenue near Sixty-sixth street, Woodlawn Park; cost \$4,850. Building is to have galvanized iron cornices, electric bells, stained glass, etc.

Architect C. M. Palmer reports: Plans prepared for D. F. Anderson, for a block of eight two-story dwellings, 20 by 38, to be erected at once on Spaulding avenue and Twenty-first street, facades to be of pressed brick, with cutstone and terra-cotta trimmings, interiors provided with closets, baths, stained glass, hot air heat, electric bells, etc., etc.; cost \$35,500 each.

Architect H. R. Wilson has made plans for four-story block of stores and flats, 135 by 96, to be built at the corner of Lincoln and Garfield avenues, for W. H. Thomas & Sons, facade to be of Anderson pressed brick, with Bedford stone trimmings, marble mantels, elevator and modern improvements; cost \$50,000. On the boards: Plans for a two-story residence on Vernon avenue, south of Thirty-fourth street, to have pressed brick front, with Marquette stone trimmings, Marquette rock face basement, interior hardwood finish first floor, electric bells etc.; cost \$6,000.

Architect F. R. Schock reports: Plans three-story flat building, 22 by 33, Anderson pressed brick and stone trimmings, to be erected at 3331 State street; cost \$8,000. Frame residence, 30 by 50, to be erected at Anstin; cost \$7,000.

Architect A. Smith reports: Plans two-story flat building at Warren avenue near Leavitt street, for C. H. Jordan; cost \$14,000. Connecticut brownstone first story, upper story pressed brick and brown stone trimmings, copper ornaments and embellishments. Vault at Graceland cemetery for H. Ahrens; cost \$6,000.

Architect Adolph Pfeiffer reports: Plans for four-story store and flat building on 2805 Third avenue, for A. Rinschler; cost \$16,000. Five-story brick tenement building to be erected on Brook avenue, for H. Hunderheim; cost \$5,000. Two five-story brick

with stone fronts, flats, to be erected on One hundred and Fifty-fifth street, east of Lincoln avenue, for R. Helmke; cost \$17,000. And a similar flat building for same owner, to be erected on Alexander avenue and One hundred and Forty-second street; cost \$25,000. Five four-story brick and stone flats, 20 by 60 each, to be erected on One hundred and Fifty-second street and Courtland avenue, for J. and M. Hoffen; cost \$45,000.

Architect W. L. Carroll has prepared plans for a three-story flat building, 42 by 62, to be erected by R. Labroco at 195 Ewing street; cost \$10,000.

Architects Ackerman & Sunderland report: Plans for factory building for T. Hennessy, on Desplaines street near Polk, to be two stories, 50 by 100; cost \$10,000. For three-story and basement residence to be built on Michigan avenue north of Sixteenth street. The facade will be of blue Bedford stone, foiled by copper and red slate. The interior will be finished in hardwoods in solid and elegant styles; cost \$50,000. For two-story store and flats, 40 by 60, to be erected by Sparks & Gross at 392-394 Thirty-ninth street; cost \$3,500. Three-story store and flats to be erected by W. Engelbrecht at 832-834 Twenty-first street; cost \$20,000.

Architect Wm. Thomas has prepared plans for four two-story brick dwellings to be erected at 818-824 West Jackson street, for Mrs. J. Brooks; cost \$18,000.

Architects Enders and Warneke have prepared plans for three two-story pressed brick and brownstone houses, to be erected at 3727-3731 Ellis avenue, for Mrs. C. Cook; cost \$25,000.

Architect J. H. Carpenter has prepared plans and is taking figures on: Four two-story dwellings 75 by 70, to be erected on Robey street, between Adams and Jackson; cost \$15,000. Two-story and attic dwelling on Sixty-seventh street and South Park avenue; cost \$6,000.

Architect P. W. Ruehl is preparing plans for a pressed brick residence with Connecticut brownstone trimmings, 22 by 50, for Dr. Iuka, to cost \$5,000.

Architect C. H. Gottig reports plans for store and flat building, to be built by P. McManus, at 443-445 South Halsted street; cost \$15,000.

Architects Cole & Dahlgren report: Plans dwelling for Dr. J. F. Thompson, on Ellis avenue near Forty-third street; cost \$10,000. Store and flat building to be built at Ravenswood for W. G. Stevens; cost \$5,000.

Architect T. V. Wadskier reports: Plans for two-story factory building, 100 by 139, to be built by J. M. Williams at 234-244 Newberry avenue; cost \$18,000.

Architect J. Duncan reports: Plans for ten-story office building, to be erected on Quincy street near Dearborn, area 75 by 60, pressed brick, front trimmed with blue Bedford stone and terra-cotta; elevators, etc.; mason work by J. Downey; carpentry by Wm. Mayor; also adjoining at 217-225 Dearborn, two-story addition; cost \$100,000.

Architect A. F. Boos reports: Plans for three-story flat building to be erected at 269 Dayton street, for F. F. Oppitz; cost \$7,500. Two two-story dwellings, 40 by 27, to be erected at 135-137 Hamlin avenue for T. J. Diven; cost \$4,000. Three-story store and flats to be erected at 110-112 Market street for C. Johnson; cost \$6,000. Six two-story dwellings, 54 by 100, to be erected at 224-234 Hoyne avenue for C. B. Wilson; cost \$12,000. Five-story factory, 50 by 160, to be erected at 198-200 South Clinton street for Warren Springer; cost \$40,000. Two two-story dwellings, 40 by 35, to be erected at 189, 191 Irving avenue for Mrs. S. Webb; cost \$4,500. Two-story flats, 35 by 75, to be erected at 129-133 Thirtieth street for J. J. Mix; cost \$8,000. Three-story flats, 48 by 44, to be erected at 282-284 Robey street for H. J. Johnson; cost \$7,500.

Architects Ostling & Bourgeois, Jr. Woodstrom, builder, have prepared plans for a three-story flat building on West Erie street near May, now in course of construction, St. Louis pressed brick, rock face Bedford stone trimmings, stained glass, marble mantels, etc.; cost \$10,000. Also three-story and basement flat, 26 by 60, southeast corner of Wrightwood and Racine avenue, Lake View, for J. Dethke; cost \$6,000. Also two-story flat building, 22 by 62, for Miss Curle at 479 West Congress street; cost \$5,000.

Architects Sprague & Newell report: Plans for five dwellings to be erected on Oakwood avenue; white brick Connecticut brownstone trimmings, mantels, electric bells, etc.; cost \$20,000.

Architect J. Otter has prepared plans for the following, under construction: Three-story and basement apartment building, 22 by 63, for M. Welsh, pressed brick front, Lemontstone trimmings, at No. 179 Oak street; cost \$7,000. Three-story flat building on Diversy avenue near Clark street, for J. Gustason; cost \$9,000. Double three-story and basement structure at 246-248 North State street, two stores and four flats, 45 by 90, store-fronts iron and plate glass, building front pressed brick, Marquette stone and terra-cotta trimmings; cost \$17,000. Stone church building for the Swedish Lutheran Society of Batavia, Ill., area 42 by 85, spire 125 feet; cost \$20,000. Three-story flat building, 44 by 82, Bedford stone facade, at Portland avenue between Thirtieth and Thirty-first, for Carlson & Gustason; cost \$14,000. Three-story flat building, 22 by 50, pressed brick with stone trimmings, at Sedgwick street near Oak, for Mrs. McCarthy; cost \$7,000. Three-story flat building, 22 by 52, pressed brick and stone trimmings, for G. Anderson on Portland avenue.

Architect H. B. Wheelock reports: Plans for four-story and flat building, 250 by 100, to be erected on the corner of Halsted and Monroe streets for Chas. Morrison; the front is to be of pressed brick trimmed with stone and terra-cotta; the design provides for bays—a large circular bay terminating with a tower on the street corner; cost \$150,000.

Architect F. Ahlschager reports: Plans for four-story hall building, 57 by 125, Anderson pressed brick front, trimmed with buff Bedford stone, to be erected by Yondorf Bros. at 163-167 East North avenue; cost \$70,000. Two-story and basement residence, 32 by 48, rock face Lemont stone, basement, frame above, wood mantels, electric bells, etc., etc., to be erected on Indiana avenue and Sixtieth street by W. S. Calhoun; cost \$6,000.

Architect J. H. Huber reports: Plans two three-story basement and attic dwellings, 59 by 39, pressed brick facade, stone basement, mantels, electric bells, furnaces, etc., to be erected on State street near Walton Place; cost \$12,000. For alterations and addition to hall corner of State and Thirtieth streets; cost \$7,000.

Architects Schaub & Berlin report: Plans for four-story and basement store and flat building, 27 by 100, Anderson pressed and ornamental brick, brown Bedford stone and terra-cotta trimmings, stained glass, electric bells and modern improvements, to be erected corner of Wel's and Locust streets, for I. L. Ide; cost \$15,000. Three-story and basement flat building, 32 by 58, Anderson pressed and ornamental brick, terra-cotta trimmings, marble mantels, electric bells, etc., to be erected by J. Weisenberger on North Franklin street; cost \$9,000.

Cincinnati, O.—Reported by Lawrence Mendenhall.

Cincinnati is just enjoying her first exhibition of architectural studies. While it is a display made by one firm only, Buddemeyer, Plympton & Trowbridge, yet their name alone is a sufficient guarantee of its merit. Emery H. Barton, one of our leading art dealers, has fitted up a beautiful aesthetic gallery in his store, which was secured for the exhibition. Jas. Trowbridge, of the firm, is one of our best water-colorists and has certainly shown a thorough knowledge of architectural coloring in the nineteen dainty bits of water-color perspectives. Mr. Plympton and Mr. Buddemeyer both show their proficiency in the six pen and ink and black and white drawings. To make the exhibit still more attractive several charming photographs of houses planned by and erected under this firm's supervision, are exhibited by Mr. Arthur Le Boutillier. In the plans and elevations, ten in number, great care has been taken to combine beauty and economy of space, with good construction. The tout-ensemble speaks praise for all concerned and let me hope that other architects will fall in line and allow the works of their hands and genius serve as studies for architectural students.

At the present writing indications point to a general strike in the building interests, which will prove disastrous to the boom. The strike of the bricklayers last summer drove many plans for fall buildings out of the market. These, in addition to many others, are again on the market and the mechanics are simply killing the goose which lays the golden egg by their extremely asinine course. The architectural iron-workers are already striking for ten hours' pay for nine hours' work, and the first of April will find other branches out. If there are wrongs to be rectified, the contractors owe it to themselves and the public to do it, but if not, the demand is equally imperative to stand firm. Cincinnati is growing and nothing must be done that will retard the growth.

Architects Samuel Hannaford & Sons, report: Pressed brick store, six stories high, for James Glenn, 25 by 122 feet, to be erected at Fifth and Sycamore streets; also store for same gentleman, to be erected on the North side of Fifth, between Vine and Race streets; brick and iron front, 30 by 100 feet; double dwelling for W. F. Thorne, to be erected on west Eighth street; college building at Cedarville, O.; Turner Hall at Terre Haute, Ind.; block of stores and flats for B. H. Hayes, Waynesville, O.; remodeling building at northwest corner Fourth and Plum streets; adding two stories and building twenty feet additional on the north for office building, for H. W. Derby.

Architect A. O. Elzner, formerly superintendent of the new Chamber of Commerce building, has opened an office of his own and already has his time well employed.

In the competition for the Detroit Museum of Art, this gentleman was awarded the second prize of \$300.00. The design speaks volumes of praise for Mr. Elzner, who is rapidly acquiring that boldness of treatment of architectural subjects peculiar to his former tutor, the late H. H. Richardson. Among the plans on his boards are the following:

The Kennedy Heights Syndicate is having plans drawn for a hotel 43 by 93 feet to be built of frame and half timber. It will contain twenty-eight bedrooms besides all offices, dining and breakfast halls, closets, baths, kitchens, etc., and all modern improvements. The combinations here are quite striking and harmonious; cost \$15,000. Stable built of brick and stone, with all conveniences, for Harley T. Procter, Esq., cost \$6,000. Miss Clara E. Nourse will build a block of three dwellings of frame containing nine rooms each; cost \$8,000.

The Duhme Estate will build a pressed brick and iron front building five stories high for store purposes. W. H. Evans, Esq., will build a frame residence of ten rooms, two and a half stories high, hardwood finish, slate roof, etc.

Chas. Hofer, Esq., of Avondale, O., will build a store and flat building, to be three stories high and of brick.

Hazen Manufacturing Co. will build a factory five stories high, 70 by 150 feet.

Architect W. W. Franklin reports taking bids on Hartwell School House; J. Sweetzer, two small cut shingle dwellings to be erected at Kennedy Heights, to cost \$3,000 each; frame dwelling for F. V. Andrews, to be erected in the same place to cost \$3,000; also frame dwelling for Chas. Green, same place, to cost \$3,000; hotel at "Coney Island of the West," to contain thirty rooms, billiard room, etc., frame, to cost about \$12,000; four story brick flat with two stores for Gus Alms to be located at the southeast corner of Liberty and Race streets; William Ulrich, dwelling and workshop, No. 382 Freeman avenue, brick, cost \$3,000; an addition to Abe Steinau's dwelling on Gilbert avenue, Walnut Hills.

Architect S. E. Desjardins reports: Chapel for the sisters of the Good Shepherd, Carthage, O., contract let, to cost \$16,000; stone and tile dwelling for Charles F. Louden, to be erected on Forest avenue, Avondale, to cost \$14,000; Frame dwelling for W. H. Page, Norwood, O., to cost \$5,000; frame dwelling for R. T. McComas to be located near Linwood, to cost \$3,000; and letting the contracts for Bellevue school house, to cost \$15,000. He is making sketches for other buildings.

Architects G. and A. Brink report: Three and a half story brick tenement for C. Grote, with stone trimmings, to be erected on McMicken avenue near Vine street, to cost \$10,000. Fred. Schorr, owner; three and a half story brick tenement for Mrs. Saunders to be erected at 87 Oliver street, to cost \$7,000, and two and a half story brick dwelling to be located on Isabella street, Newport, Ky., for Henry Veith, to cost \$3,500.

Architect Emil F. Baude reports: Three story brick dwelling to be erected on Carlisle avenue for Henry Helmig, to cost \$5,700; two and a half story dwelling, same avenue for Mr. Behrens, to cost \$4,800, and two and a half story brick dwelling for John Kennedy, to be erected at Camp Washington, to cost \$3,000.

Architect M. Rumbaugh reports: Two and a half story brick dwelling for M. Rein to be located in Coryville, to cost \$4,500, and remodeling First National Bank, Findlay, O., to cost \$5,000.

Architect Theodore A. Richter, Jr. reports: Chas. Dauner, two-story frame dwelling, to be erected in Avondale, cost \$2,000; J. J. Brackman, two-story frame dwelling, six rooms, to be erected on Browne street, cost \$3,000; and two and a half story frame dwelling for Chas. R. Parker, to be erected at Sedamsville, O., cost \$2,000.

Architect W. Stanton Robinson is making sketches. He recently opened an office at No. 5 West Fourth street. He was formerly in the office of Architect Theodore A. Richter.

Architect W. S. Archer has opened an office at 532 West Fifth street. He is making plans for a frame dwelling for A. M. Warner, to be erected on Walnut Hills, cost \$3,800, and has finished plans for a dwelling to be erected at Sterling, Kansas. He is making sketches.

Architect Emil G. Reuckert reports: Three story brick dwelling, south side of Bank, near Central avenue, for John V. Maescher, to cost \$6,300, let; Fred. Frech, three and a half story and basement brick tenement, south side of Buckeye, near Oak street, to cost \$7,800, let; Chris. Von Seggern, three story stone front residence to be located on Elm near Fourteenth street, to cost \$6,000; school house and hall to be located on the corner of Pendleton and Abigail streets, for St. Paul's church, to cost \$14,000; five and a half story iron front building to be located on the northwest corner of Twelfth and Jackson streets for A. and J. Doescher, to cost \$9,000, size of lot, 27 by 33 feet; two and a half story brick dwelling for George W. Schneider to be erected in Cummins ville, to cost \$3,500; two and a half story frame dwelling for Chas. Weber and others to be erected on Euclid avenue, Coryville, to cost \$3,500 each, and ice house for the Foss, Schneider Brewing Co., to be erected in Virginia.

Architect W. Martin Aiken reports: Cottage for John V. Lewis, shingle, 50 by 65 feet, two and a half stories high to be located at Nonquit, Mass., finished in cypress, yellow poplar and Pine, cost \$7,000; alterations for Matthew Addy, stone porches, terraces, etc., Mt. Auburn; L. C. Weir, brick and plaster two and a half story dwelling, to be located on Mt. Auburn, slate roof and hardwood finish inside, to cost \$8,000; making sketches for others.

Denver, Col.—Architect D. McD. Graham reports the prospects for the coming year good. A moderate "boom" is expected, with plenty of workers to carry it on.

Des Moines, Ia.—Architects Foster & Libbe have reported plans for improvements to the opera house, to cost \$10,000. A block of two stores in East Des Moines, for L. Graham, of Grinnell, to cost \$9,000.

Detroit, Mich.—Architect W. G. Malcomson has prepared plans for a factory building for the Peninsular Lead Company, to cost \$20,000; M. Bluy & Son, contractors; also for a brick store building, to be erected on Woodward avenue, by S. K. Taft; cost \$10,000.

Architect J. McGregor has prepared plans for a brick shop building for the Michigan Car Company, to be erected on Clark street; cost \$10,000. H. Carew, contractor.

Architects W. Scott & Co. have prepared plans for a brick barn and stables, to be erected on Lafayette avenue, by J. Stanley; cost \$12,000; Topping & Fischer, contractors.

Fargo, Dak.—Architect W. W. Boyington, of Chicago, is preparing plans for a two-story brick-veneered residence, 40 by 60 feet; to be erected for Mrs. O. J. De Lendrecie; modern conveniences; cost \$10,000.

Fort Smith, Ark.—The government is building a three-story brick jail, 43 by 93 feet; to cost \$40,258; to be completed in seven months.

Fort Wayne, Ind.—Architects Wing & Mahurin report prospects good for the coming season. The following work is on the boards, ready for bids, and under way: For H. C. Berghoff, two-story and basement frame, 38 by 60 feet; cost \$5,000. For T. B. Shofa, three-story and basement brick store building, 37 by 110 feet; cost \$5,000. H. Seimon, three-story brick store building, 25 by 60 feet; cost \$4,000. For R. T. McDonald, two-story and basement frame cottage, 38 by 60 feet; cost \$5,000; with several less expensive structures.

Frankfort, Ky.—Architect McDonald, of Louisville, has prepared for the Commissioners Public Schools, plans for a two-story Colored Normal School building to be 56 front by 40 deep. The walls are to be of brick, trimmed with limestone. Estimated cost \$8,000. Bids are invited.

Hastings, Neb.—Architect C. C. Rittenhouse has prepared plans for two-story and basement school house, brick, with cutstone trimmings; cost \$23,000; construction to be commenced at once; general contractors, Scales & Clark.

Joliet, Ill.—The outlook for the coming season is reported as good and promising.

Architect Julian Barnes reports the following plans prepared and on the boards: Three-story and basement store and office building, 44 by 80 feet, brick and stone; for Abbott & Reichmann; cost \$15,000. Two-story and basement store and tenement building, 60 by 126 feet, brick and stone; for McDermit & Swiggert; cost \$13,000. Two-story double frame tenement, 44 by 60 feet; for G. Greenbaum; cost \$4,000. Two-story residence, 30 by 50 feet, for A. Sanderson; cost \$3,500. Two-story residence, 32 by 48 feet, for Wm. McDermit; cost \$3,500. Two-story residence, 28 by 44 feet, for A. Vance; cost \$2,000. Two-story residence, for H. B. Jackson; cost \$2,225.

Kansas City, Mo.—Architects Van Brunt & Howe are preparing plans for the Kansas City Club building to be erected on the corner of Twelfth and Wyandotte streets; cost \$100,000. It is to be four stories high, brick with red sandstone trimmings, Romanesque style, with Gothic additions. The interior is to have billiard halls, card rooms, bath rooms, bowling alleys, suites of chambers, toilet rooms, dining rooms, cafes, etc. A great feature will be a summer garden situated directly over the billiard room, surrounded with a facade of Corinthian pillars, supporting highly sculptured entablatures. It is to be lighted by a number of incandescent lamps.

Architect C. F. Kirby reports: Plans for a church to be built on Nineteenth and Woodland streets; cost \$15,000. Double dwelling for W. H. Collins; cost \$10,000. Three-story residence for Rev. S. O'Brien Lowry; cost \$10,000.

Secretary F. A. Hotch reports: A Y. M. C. A. building to go up early in the spring. Exterior pressed brick with stone terra-cotta trimmings, and other elegant accessories; to cost \$75,000.

Little Rock, Ark.—The Missouri Pacific Railway is to commence the erection, immediately, of immense brick shops at Argenta, opposite Little Rock; also a three-story brick hotel at Van Buren, Ark.

Logansport, Ind.—Architects Crain & Knikel report: Outlook good for a busy season if labor strikes do not intervene. The following ready for bids and on the boards: For Geiger Bros., three-story brick and stone building, terra-cotta trimmings, tin roof, 22½ by 110 feet; cost \$6,000. For George Strecker, three-story brick and stone building, terra-cotta trimmings, tin roof; cost \$6,500. For Charles Wats, two-story frame building 36 by 51 feet; cost \$3,000. For E. D. Closson, brick and stone addition 30 by 36 feet; cost \$3,000. Addition to Lutheran church at La Porte; cost \$5,000.

Louisville, Ky.—The activity in the real estate market during the last two weeks of March has attracted attention outside of the city, and it is claimed that capitalists from abroad will largely invest here and replace some of the dilapidated business houses with new structures. This would be a welcome move in the right direction, as Louisville can boast of having less suitable business houses than any other city of her size. So far the weather has been too changeable to admit of constant outdoor work, and consequently but very little has been started. The bricklayers are again renewing their demands for ten hours' pay for nine hours work, and from all appearances house building will cost from 15 to 20 per cent more this year than last. Most architects are busy with new buildings, and a few business houses are spoken of. The different lodges of Odd Fellows have incorporated an organization for the purpose of erecting a widows' and orphans' home, similar to the Masonic Home in this city. The building is to cost not less than \$100,000. The chief engineer of the Pennsylvania Central Railroad has been in this city surveying ground on which to erect new freight houses and a round house for the I. M. & I. R. R.

Architects McDonald Bros. have prepared plans for a four-story addition to factory, 50 by 195 feet, brick, for Avery & Sons; cost \$16,000. Two-story residence for A. Harmon, on Second and Magnolia streets, 30 by 65 feet, brick, red sandstone trimmings, galvanized cornices, electric bells, speaking tubes, stained glass, hardwood finish, tiling, etc.; cost \$6,500. For J. Owsley, two and a half-story residence on Chestnut and Twenty-first streets, pressed brick, red sandstone trimmings, galvanized iron cornices, electric bells, speaking tubes, stained glass, hardwood finish, tiling, slate roof; cost \$8,000. For J. W. Green, two-story residence on Second and Magnolia streets, pressed brick, Indiana red sandstone trimmings, closets, bath, galvanized iron cornices, stained glass, wood and slate mantels, dumb waiters, hot air heat, slate and tin roof; cost \$14,000.

Architect D. X. Murphy has prepared plans for the School Board for a three-story Public School building, 60 by 100, cost \$28,000. Wm. Fichtun & Co., contractors.

Architect C. L. Clarke has prepared plans for the Kentucky Woolen Mills Co., for a two-story factory addition, cost \$7,500. John Fichtun, contractor.

Architect C. F. Withers of N. Y. City has prepared for Church of the Advent plans for a one-story church building, 40 by 104, to be erected on New Broadway and Baxter avenue, brick, Indiana limestone trimmings, stained glass, iron cornices, hardwood finish, hot air heat, cost about \$2,000. Bids invited.

Architect Chas. Meyer has prepared plans for C. Nolling for a three-story store and dwelling, 45 by 90, to be located on Broadway and Shelby streets, brick trimmed with stone, cost \$8,000. Kimbel Bros., contractors; for C. F. Kellner, two and a half-story dwelling, 40 by 75, to be erected on Broadway and Floyd street, brick trimmed with stone, closets, bath, stained glass, etc., cost \$9,000. A. N. Stouch, contractor.

Architect C. S. Mergell has prepared plans for the Highland Presbyterian Church Society for a church and Sunday school building, 50 by 75, to be erected on Broadway and Highland avenue, brick with limestone trimmings, iron cornices, stained glass, hardwood finish, hot air heat, to cost \$14,000. Bids invited.

Architect H. Wolter has prepared for E. D. Standiford plans for remodeling three-story business house, 30 by 150, located on Market, near Seventh street, cost \$8,000. J. Fichtun, contractor.

Milwaukee, Wis.—Every indication points to an exceptionally good building season this year. All of the architects have more or less to do, most of them preparing plans for dwellings and cottages within pretentious figures.

H. C. Koch & Co. have on the boards: Plans for an elegant residence for G. H. Heineman, to be built on Prospect avenue, near Brady street, to cost not less than \$25,000. The walls are to be of red brick, on brownstone foundations, with terra-cotta and polished granite embellishments. Also plans for a wagon factory building, 60 by 120 feet, for G. W. Ogden & Co., to be erected on Third street between Grand avenue and Wells street; cost \$24,000. Also plans for repair shops for the L. S. & W. R. R. at Ashland; cost \$50,000. And for summer residence to be erected at Okankee Lake, by H. G. Rogers.

Architects E. T. Mix & Co., are engaged on plans for several large projected buildings.

The following buildings are already under way: \$10,000 building on Grand ave. and 12th street, by L. Roth; three-story hotel on the site of the old William Tell House, by Ph. Best Brewing Co.

The St. Michael parish will erect a \$14,000 school building during the summer; J. H. Hinkel, a \$17,000 building on corner of State and Third streets; C. A. Beck, a \$14,000 double frame dwelling on Grand ave. and 18th street; C. Braeger, a \$7,000 three-story brick at 4th and Cedar streets; E. J. Linden, a \$6,000 brick dwelling on Marshall street; J. C. Harvey, a \$6,000 two-story frame dwelling on 18th street, between Grand ave. and Wells street. Houses costing from \$3,000 to \$5,000 are to be built by F. W. Wallace, at Webster place and Ogden street; Henry Quinn, on Astor street; C. Wadhams, on 24th street, north of Grand ave.; A. Sprengler, at 18th and Chestnut streets; Oscar Vogt, on Chestnut street, west of 18th; H. Reynolds, on Hanover street, near

Florida; Mrs. M. Schneider, at Vliet and 16th streets; W. Schmidt, at Van Moltke park; R. Ziebell, at Chestnut and 22d streets; C. Schmidt, at Walnut and 22d streets; the Rev. Wm. Koeller, on 11th street; Aug. Frieske, on 8th street, between North avenue and Lee streets; K. A. Linderfelt, at Grand ave. and 26th street; L. Wirner, at Sixth and Greenfield avenues; L. Carr, on 10th street, south of Sycamore; Ed. McNeill and C. D. Simons, at Cedar and 20th streets; R. Nagel, on Market street, between Junceau avenue and Knapp streets; H. Thiele, at Walnut and 11th streets; A. Hoelz, at Central avenue and 8th street; J. Petzold, at 14th street and Fond du Lac avenue; E. B. Simpson, on Wells street, between 12th and 13th; W. F. Hertzler, on Second street, between Wright and Clark; Capt. Olsen, on Greenbush street, between Lapham and Orchard.

Minneapolis, Minn.—The outlook for the coming season is very flattering. Preparations are being made to carry on the work of the Public Library building, and work has been resumed on the Minneapolis Bank building, which will be pushed to rapid completion. Ground, already, is being broken for many buildings, and all the architects are busy as sailors.

Architects Long & Rees report plans for \$8,000 residence for E. Canvet, to be erected on Laurel avenue; a \$10,000 frame residence for Mr. Baliss, to be built on Ridgewood; a three-story brick business block for E. M. Janney, to be erected on First avenue, to cost \$15,000; on the hoards; plans for the enlargement of the Ardmore Hotel building, and plans for a seven-story fireproof building, to be built next to the Ardmore, on Nicollet street, to cost \$70,000. It is to have an area of 44 by 155, and consist of two stories and 120 rooms above; facade pressed brick and stone ornamentation.

Missouri Valley, Iowa.—President of School Board, J. S. Wattles, reports two-story and basement school building, brick trimmed with stone, galvanized iron cornice, slate roof; 42 by 72 feet; cost \$10,000; S. E. Maxon, of Council Bluffs, architect; building inclosed.

Montgomery, Ala.—Architect Woods has prepared plans for a number of fine residences to be built this spring.

Neilsville, Wis.—Architect C. H. Griesse, of Cleveland, O., has made plans for a Lutheran Church edifice to be built here, to cost \$12,000.

New Corporations.—The Chicago Perforated Wrapping Paper Company capital stock, \$25,000; incorporators, Louis L. Munson, Stephen Munson and Fred W. Munson. The American Extract Company, at Chicago; capital stock, \$20,000; incorporators, George R. Walker, Hermann E. Stirck and Bright C. Taber; the purpose is to manufacture tannin. The American Trading Association, at East St. Louis; capital stock, \$100,000; incorporators, James F. Leighton, Jay L. Torrey and Clifford W. Darby; the purpose is to do a general commission business. The Chicago Stone and Brick Preserving Company, at Chicago; capital stock, \$10,000; incorporators, J. H. Bingham, O. T. Dahl and John Matthew. The Home Knowledge Association, at Chicago; capital stock, \$250,000; incorporators, C. Higgins, E. P. Spengler and Ola A. Lucas; the purpose is to publish periodicals and manufacture medicines. The Okadale Creamery Association, at Okadale; capital stock, \$2,200; incorporators, R. G. Ardrey, S. L. Coulter and J. R. Morrison; the purpose is to make a good quality of butter. A certificate was filed to record the increase of the capital stock of the Smithboro Prospecting & Mining Company, at Smithboro, from \$25,000 to \$100,000. A certificate was filed to record the decrease of the capital stock of the Grant Wire Company, at Chicago, to \$30,000. The Northwestern Electric Light and Lighting Company of Chicago, capital stock, \$200,000; incorporators, Gideon F. Lanahan, Charles T. Loring and Adolph Pike. The Western Lumber Company of Chicago; capital stock, \$150,000; incorporators, Thomas H. Shepard, Charles P. Miller and Charles T. Edger. The New York Anderson Pressed Brick Company, at Chicago; capital stock, \$200,000; incorporators, J. C. Anderson, Elisha Gray, S. R. Bingham, F. D. Everett and J. C. Cushman.

New Lenox, Ill.—Architect J. Barnes, of Joliet, Ill., is preparing plans for a residence to be erected by Mrs. S. E. Jones.

Omaha, Neb.—Architect Sidney Smith reports; Harris & Fisher, six stores and flats, 66 by 132; cost \$40,000. Three brick three-story and basement dwellings, 60 by 75, for H. M. Lovette; cost \$20,000. Frame residence for L. Bindford, 40 by 52; cost \$8,000. Block of seven two-story tenements for J. C. Smith, 34 by 148; cost \$20,000. Six three-story tenements for J. T. Hurlain, 36 by 132; cost \$25,000. Stone and brick residence for F. Nye, 36 by 60; cost \$15,000. Two stores and flats for F. J. Fitzgerald, 45 by 100; cost \$20,000. Contracts to be let this month.

Peoria, Ill.—The Peoria Bank and Exchange Company propose to commence work early in the season on a seven-story structure, 75 by 85, for which preliminary drawings have already been made. It is proposed to build the walls of solid Kickapoo sandstone with red granite pillars and pilasters, interior tiled and wainscoted in marbles and all modern improvements. First floor for banks, upper stories for offices; estimated cost, \$150,000.

Peotone, Ill.—Architect Julian Barnes, of Joliet, Ill., has prepared plans for a two-story bank and store building, 40 by 44, brick and stone, to be erected by A. J. Linebargu, to cost \$3,000. The building is under way. J. Zeisler is the contractor.

St. Paul, Minn.—Architects Wilcox & Johnson have prepared plans for an addition to Macalester College, the central wing, with connecting cloister, to contain the main entrance, class rooms, gymnasium, etc. It will be three stories in height, with high basement, of brick and stone, and to cost \$35,000.

Wichita, Kan.—Architects Proudfoot & Bird report plans for a female seminary to be erected under the auspices of the Congregational Church; cost \$50,000. Architect G. A. Masters has prepared plans for a \$50,000 opera house.

The Jackson Heat-Saving and Ventilating-Grate.

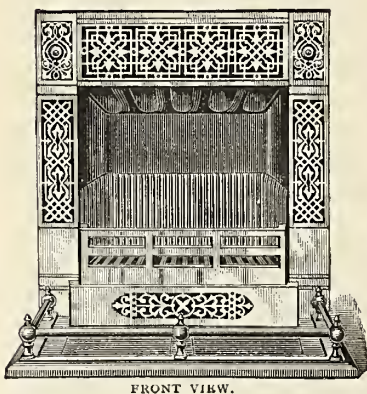
COMBINED GRATE AND FURNACE.

HEATING ON ONE OR TWO FLOORS.

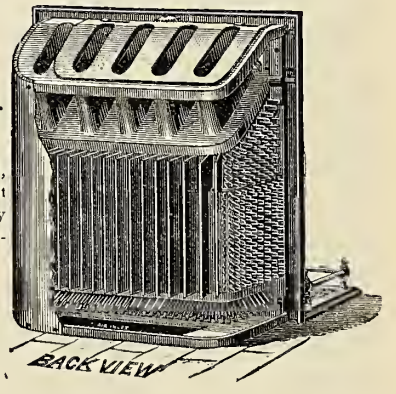
Greatest variety of rich and chaste designs in plain or oxidized Iron, Steel, Nickel-Plate, Electro-Bronze, Solid Brass, or Bronze. Largest rooms in coldest climates thoroughly heated. Out-door air warmed by the heat wasted in ordinary grates, and introduced, producing perfect ventilation and equable temperature, without drafts. In use everywhere. Illustrated Catalogues.

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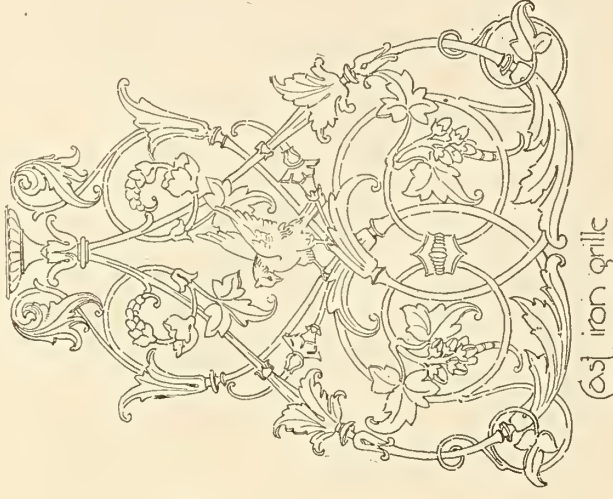
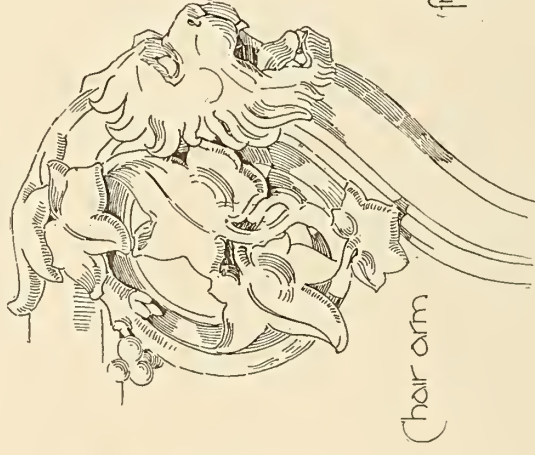
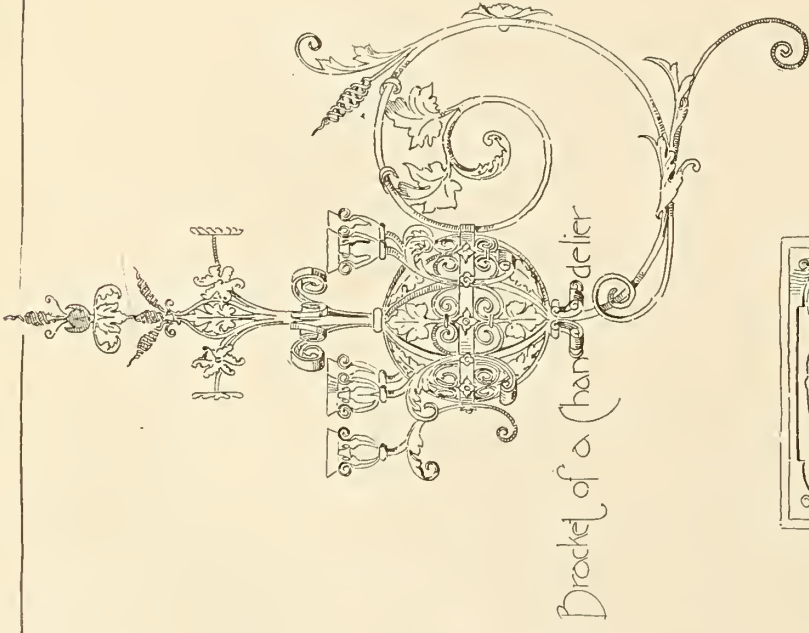
FRONT VIEW.



BACK VIEW.

THE HENRY DIBBLEE CO. Chicago Agents.

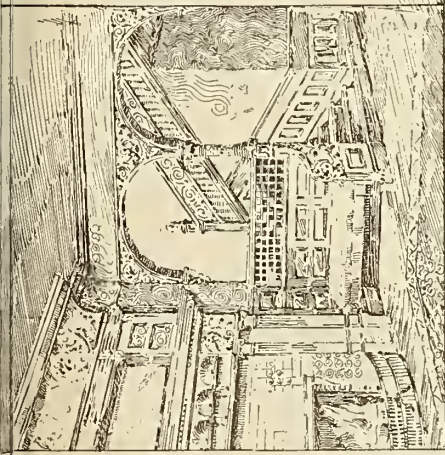
266 AND 268 WABASH AVENUE.



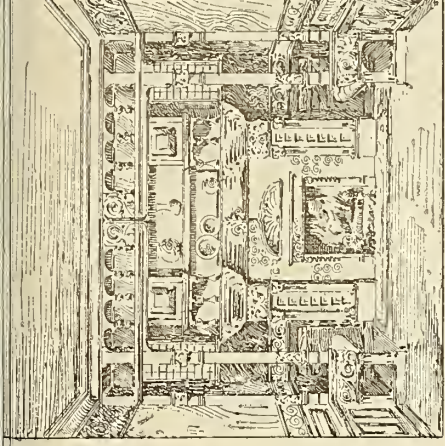
Cornstock. — Del.

Sketch Design of Residence by J. C. Ashley Esq. Taylor, Saginaw, Mich.

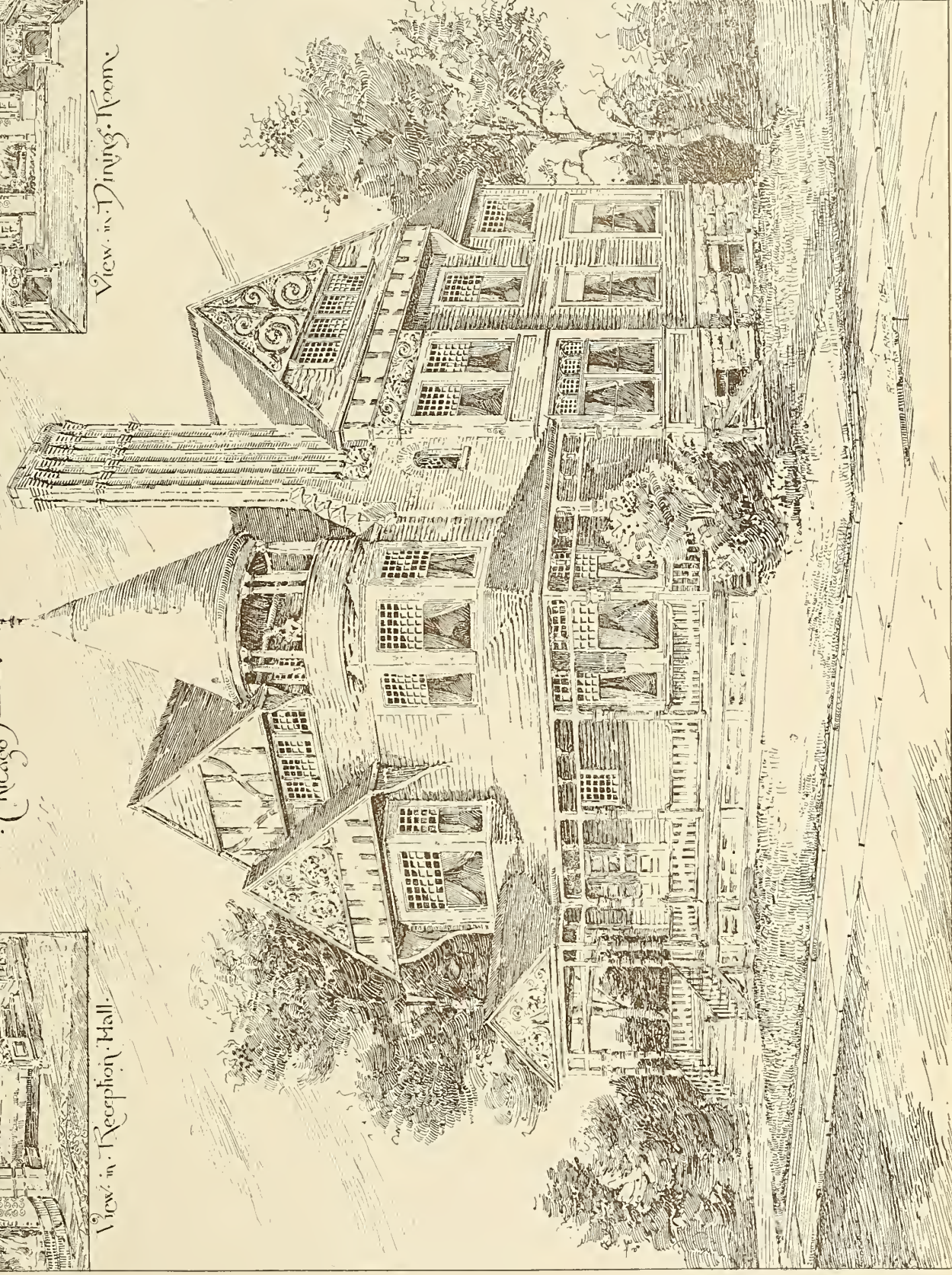
George D. Deamont,
Architect,
115 Dearborn Street,
Chicago



View in Reception Hall



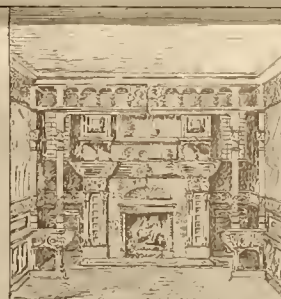
View in Dining Room



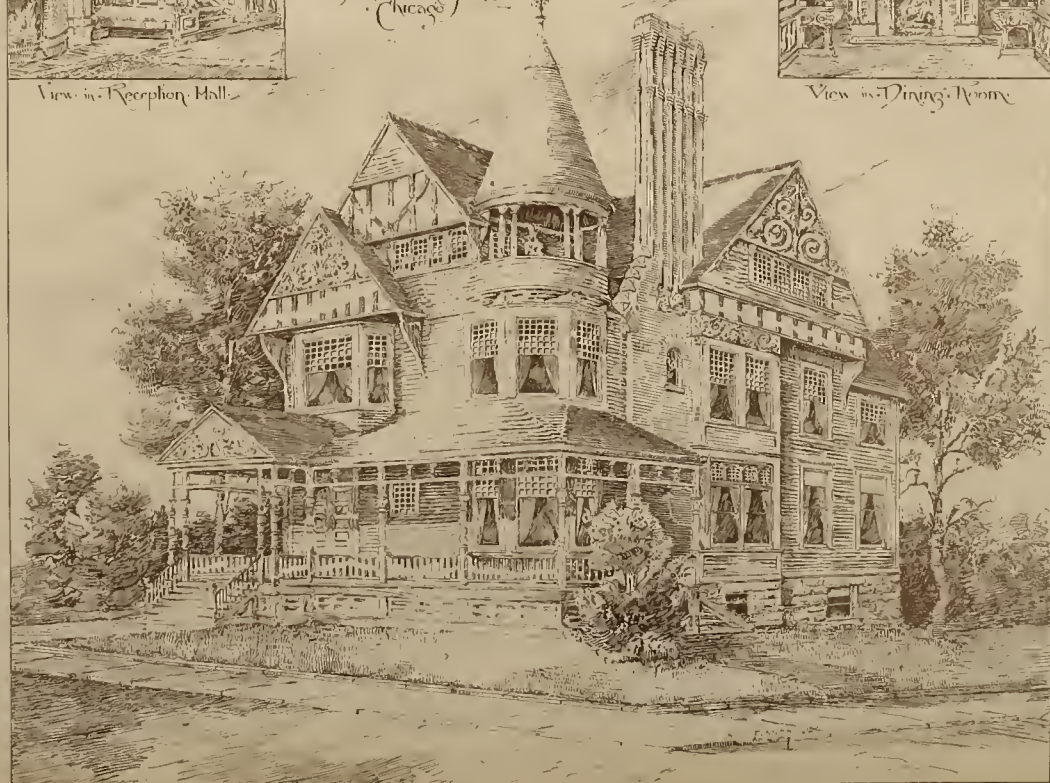


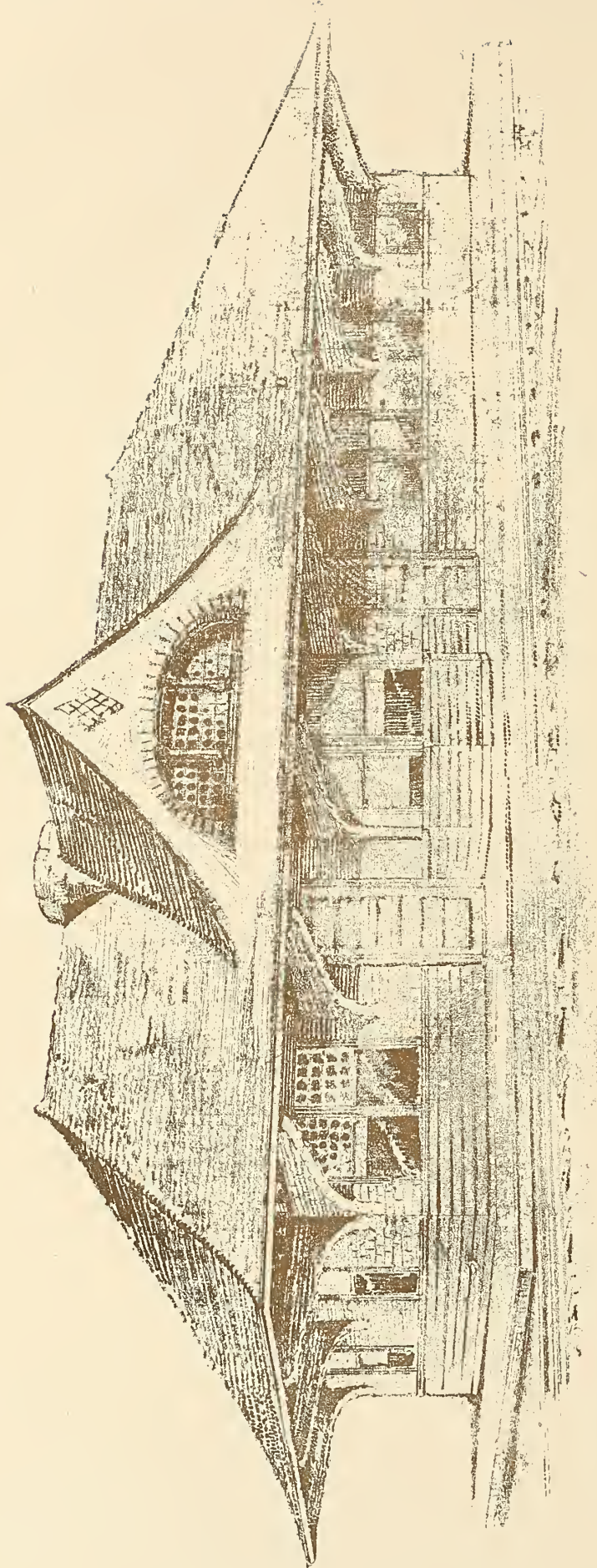
View in Reception Hall

Sketch Design of Residence
for J. C. Ashley Esq.
East Saginaw Mich.
George H. Beaumont
Architect
115 Dearborn Street
Chicago



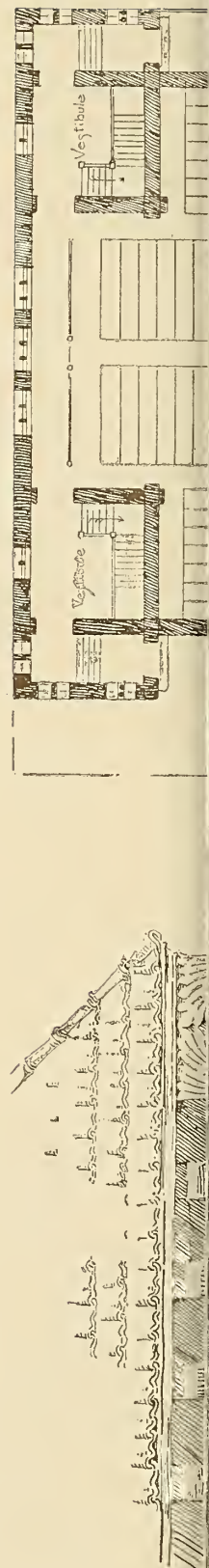
View in Dining Room

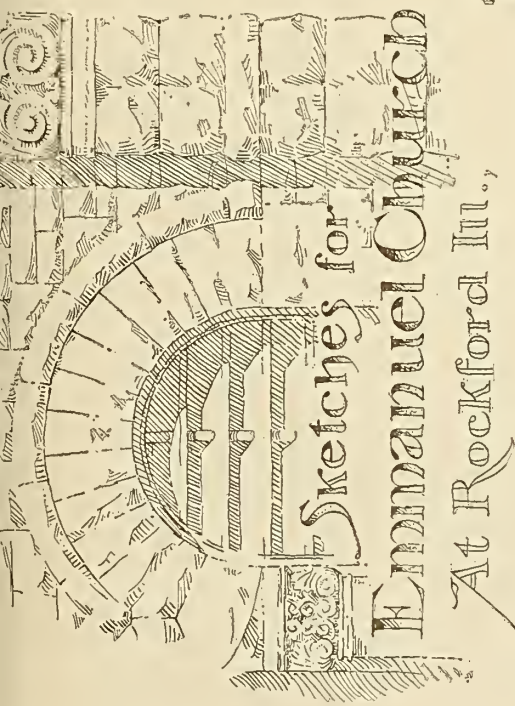




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RAILWAY STATION, KEWANEE, ILL.
BURNHAM & ROOT, ARCHITECTS, CHICAGO.

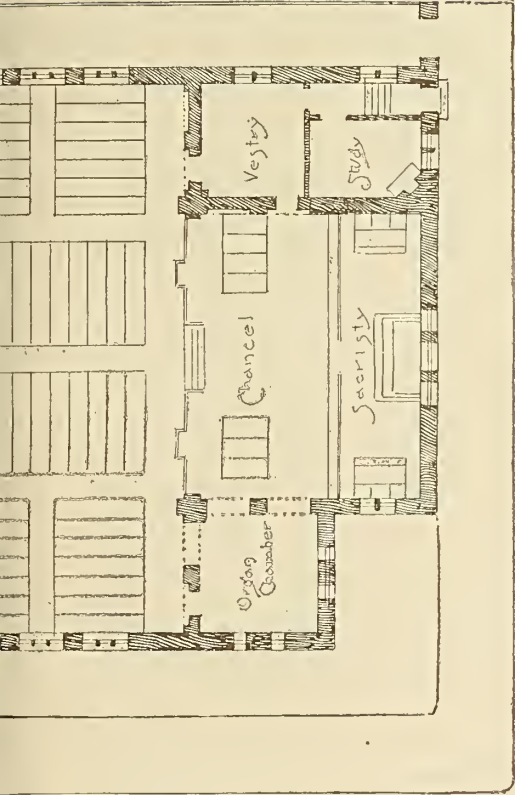




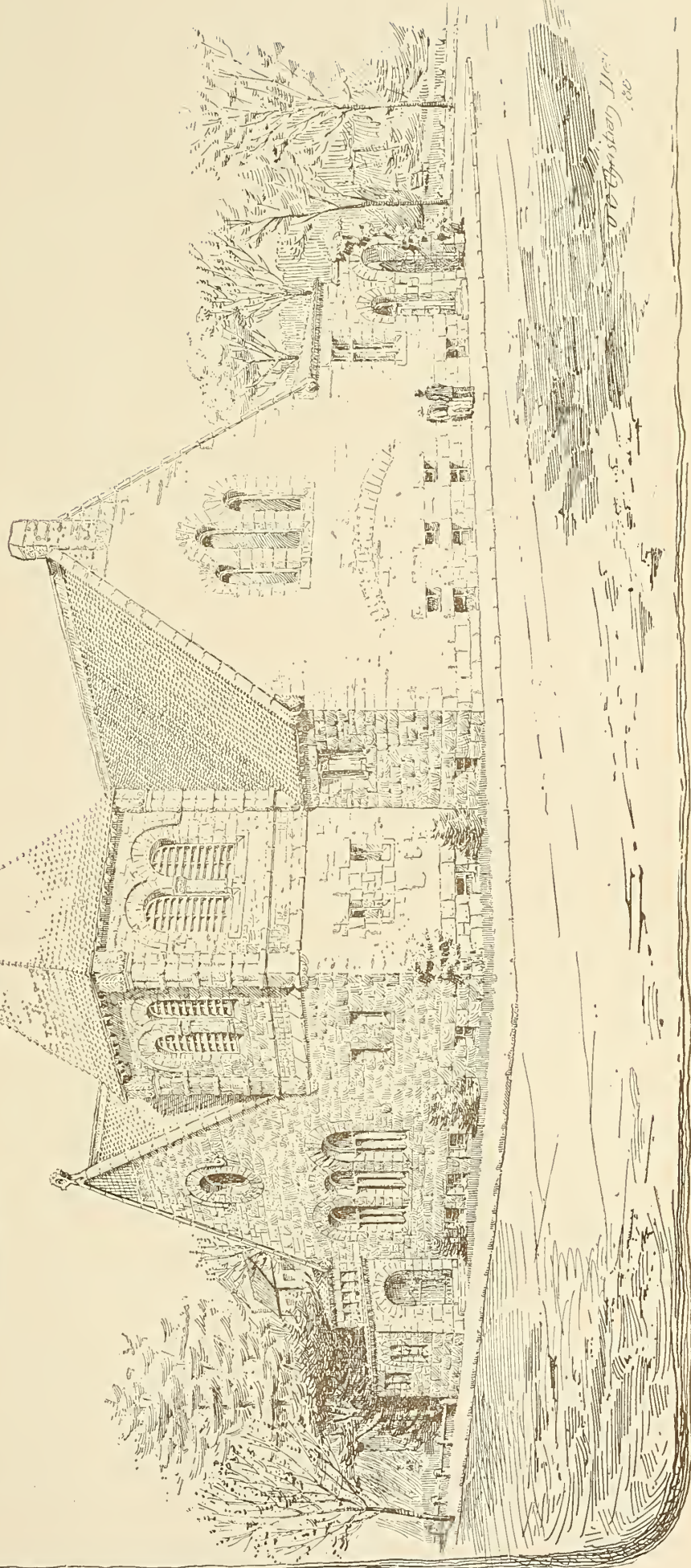
Sketches for Emmanuel Church

At Rockford Ill.,

E. Burling and
F. M. Whitehouse
Architects
Chicago Ill.,



Ground Plan



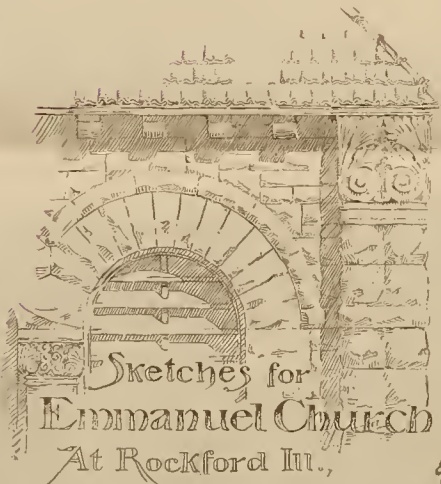
W. H. Henshaw 1161



Reproduction from a pencil drawing

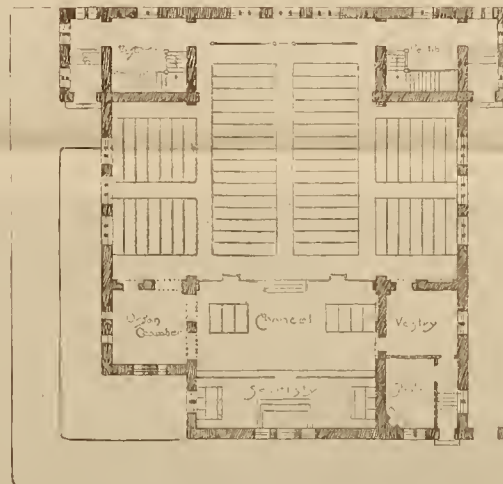
RAILWAY STATION, KEWANEE, ILL.

BURNHAM & ROOT, ARCHITECTS, CHICAGO.

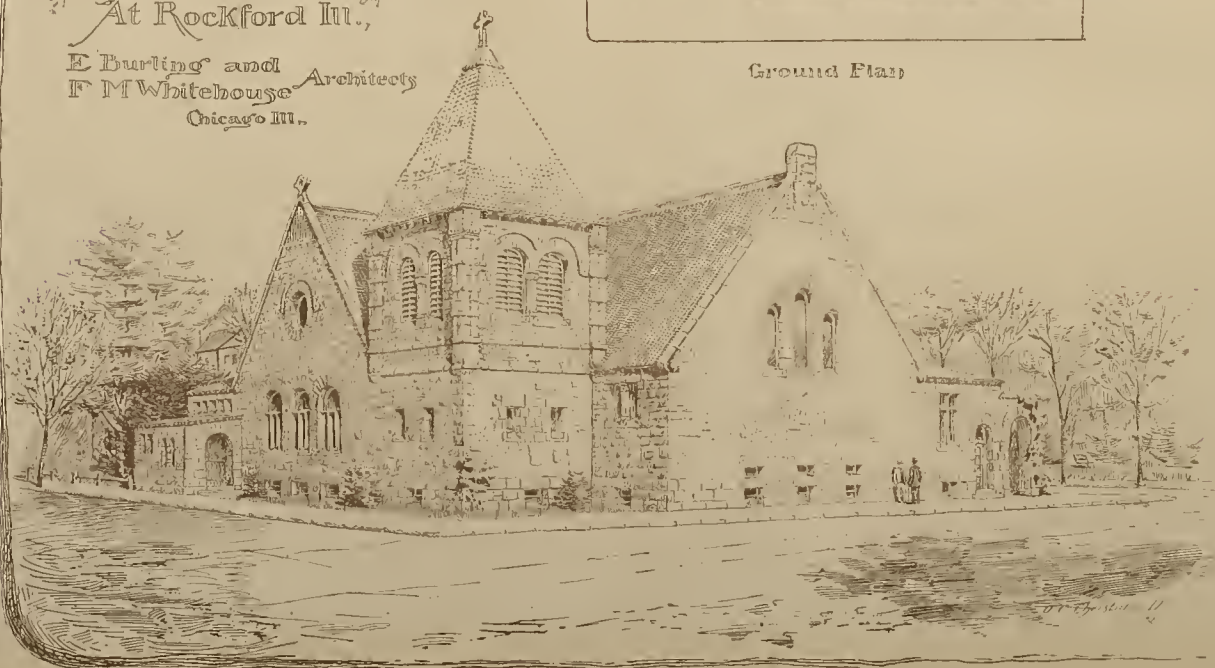


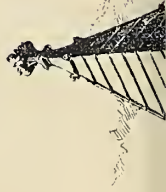
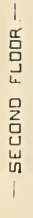
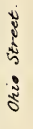
Sketches for Emmanuel Church At Rockford Ill.,

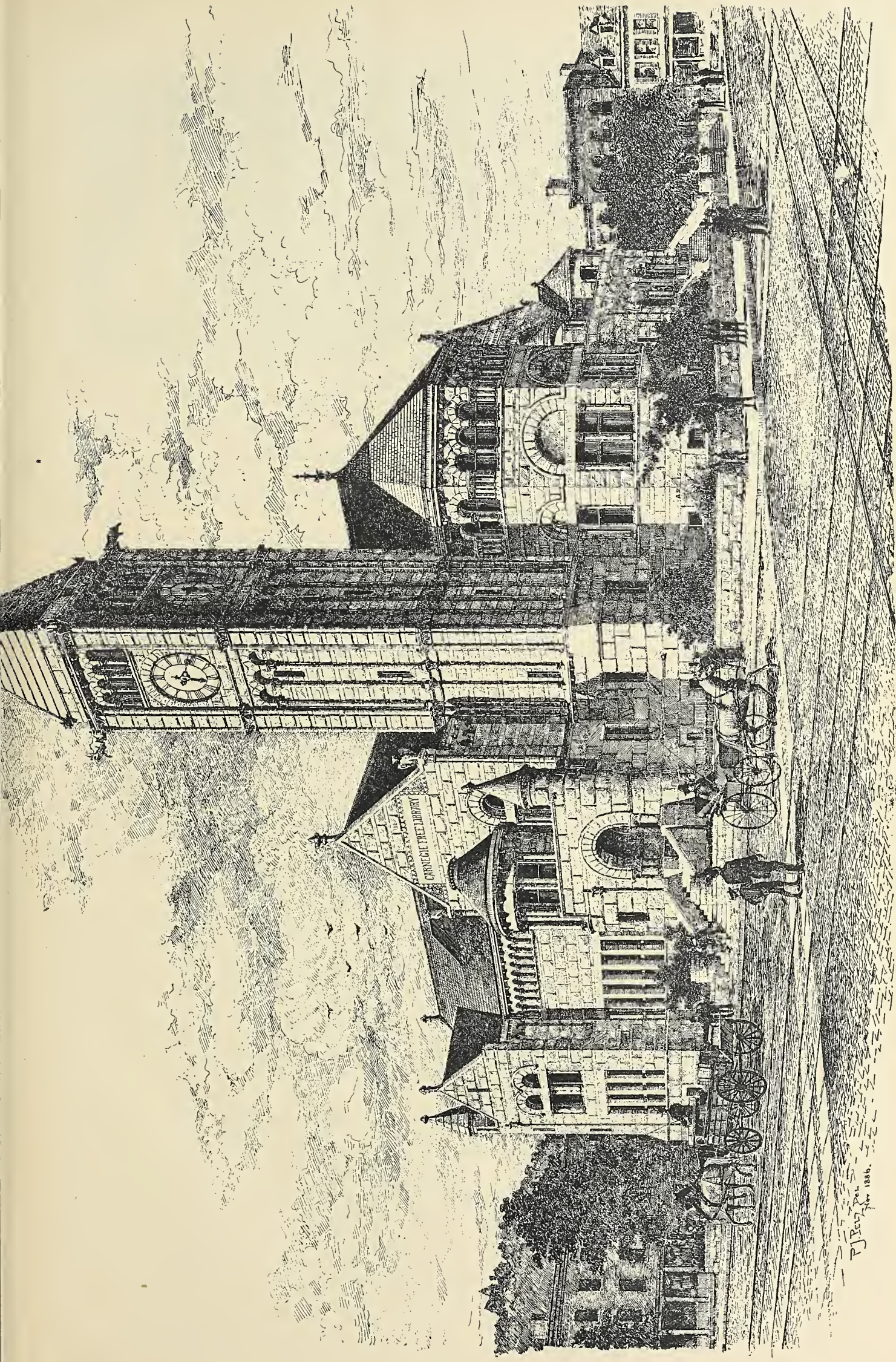
E. Burling and
F. M. Whitehouse Architects
Chicago Ill.



Ground Plan

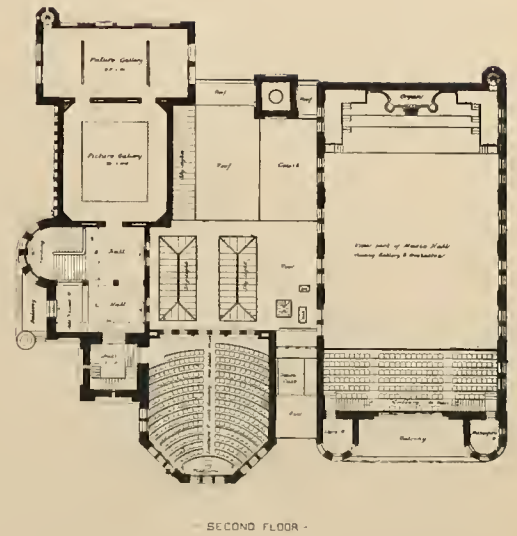
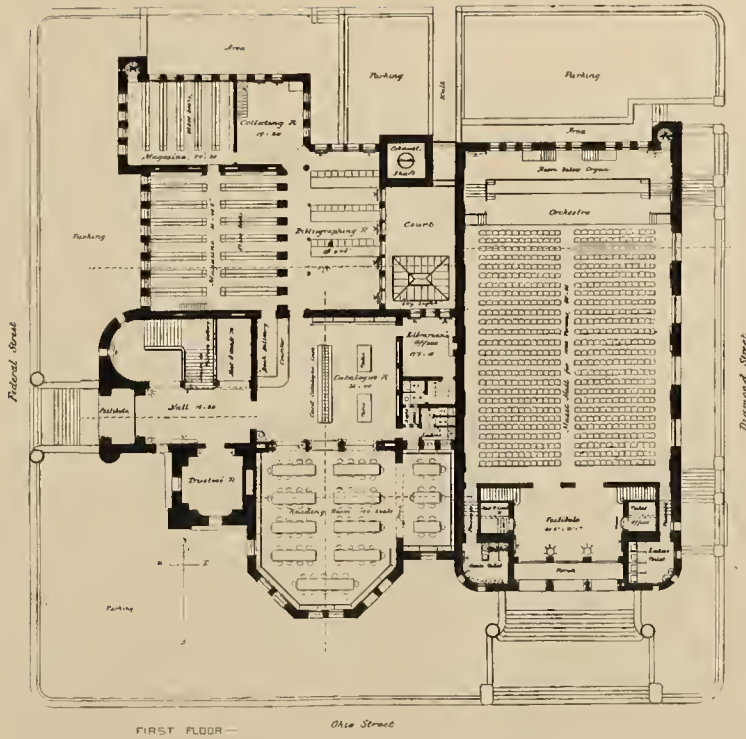






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A MONTHLY JOURNAL (WITH AN INTERMEDIATE NEWS NUMBER AND A PHOTO-GRAVURE EDITION) DEVOTED TO WESTERN INTERESTS.

VOL. IX.

CHICAGO, APRIL, 1887.

No. 5.

INTERMEDIATE NEWS NUMBER,

DEVOTED TO

ASSOCIATION AND BUILDING NEWS.

PUBLISHED BY

THE INLAND PUBLISHING COMPANY,

CHICAGO, ILL.

members of the association of master carpenters of Chicago, enjoy the thanks and approval of not only architects and owners, but of the more intelligent workmen.

Illinois State Association of Architects.

A GENERAL strike of all the carpenters belonging to trades unions in Chicago, and, through this, the abandonment of many projected buildings, has occupied the attention of those interested in building, for the past three weeks. It seems to be the fact that while, next to New York, Chicago gives the largest amount of employment to the building trades of any city, and pays higher wages, she also seems to be the most unfortunate in regard to strikes. There has hardly been a spring in the last eight years when a strike of greater or lesser magnitude has not been inaugurated, until the contractors are almost led to wish for a return of the panic of ten years ago, to teach men the value of plenty of work and good wages. The present strike occurred almost without warning, and it was a week after work was entirely stopped, before the master carpenters were notified of what the unions demanded. Then it was only indicated in a general way; and when asked for a specific statement of grievances, the leaders refused to make any further statement. As it was found that it would be useless to treat with the unions, a declaration of principles was formulated, which, with the following resolutions, were adopted as the platform of the Master Carpenters' Association:

RULE 1. The right of the employer to employ and discharge employes whether belonging to Carpenters' Unions or not.

RULE 2. The right of the employe to work or not to work with non-union men.

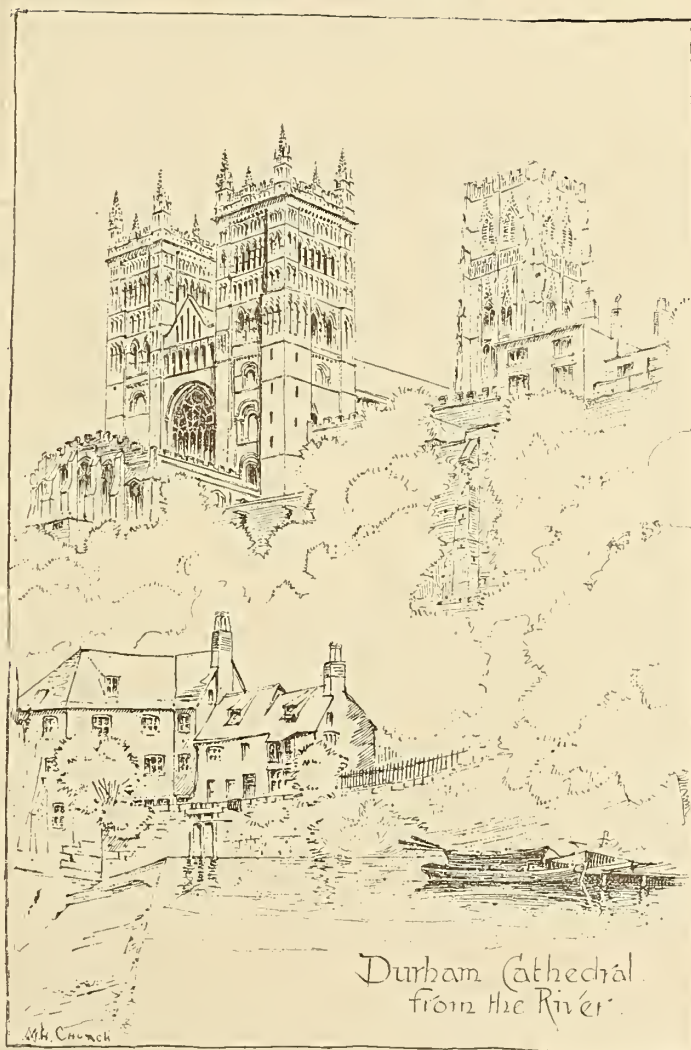
RULE 3. The right of the employer to hire unskilled labor that will suit his purpose at any price at which he can get it.

RULE 4. The right of the employe to get the wages he demands or not work.

RULE 5. The right of individuals to associate for all honorable purposes.

These rules lie at the foundation of all liberty of action, and must be recognized before any prudent business man will invest capital in any enterprise requiring the employment of labor.

The union's leaders, finding that the master carpenters were firm in support of the principles laid down, and that the men under their control were generally dissatisfied with losing money for no apparent reason, ordered the men back to work, forbidding them to work with non-union men. It has been found that very few obey where the alternative is loss of work. In taking and maintaining this stand, the



At the regular meeting of the Illinois Association of Architects, held April 2, 1887, in the absence of President Adler, the meeting was called to order by the second vice-president S. A. Treat at 2:30 P.M., and the following papers were read in the form of a symposium, the subject being: What is the just subordination, in architectural design, of details to mass.

The discussion was led by Louis H. Sullivan, followed by L. D. Cleveland and O. J. Pierce, and the summary by Mr. Sullivan.

LOUIS H. SULLIVAN.

It is frequently difficult to understand that there may be two sides to a subject. It is proportionately difficult to imagine that there may be

more than two, the number, indeed, mounting into the thousands. Therefore, while still in that placid and yielding state of mind, superinduced by distant and general considerations, I admit, once for all, that facets, without number, may be cut upon the rough gem which is presented as the subject of this symposium; and, I further admit, that each facet will reflect its share of light. I still further admit that the gem, as a whole, may be cut to suit the cutter; and, taking advantage of this concession, broadly accorded to all, I shall proceed to fashion the stone after my own predilections, even as though it were the very jewel after which I longed. To approach a step nearer: If the question is a categorical one, demanding a similar reply, I can only answer, I do not know. For who shall say what is possible, and what impossible. Who shall fathom the infinite depths of creative art? Who drink up the sea, and say "all is now dry land?" I cannot do these things; I do not believe anyone can, or will ever be able. Therefore, I believe that in this regard the question is an open one, and will forever remain an open one. Assuming next that the question is not categorical, but rather general and optimistic, I may consider its scope limited within the confines of what has been done, what is for the moment uppermost in recollection, with also an underlying curiosity regarding what may be done. This naturally makes prominent considerations of climate, locality and temperament: climate, which is the arbiter of material things; locality, with its accidental variations, superadded to those of the seasons, and both creators of temperament, which is in turn the creator and arbiter of art. All of which makes possible as a general and qualified answer: "That depends." Storms and frost would tend to influence a softening away of detail into the general mass; localities, more or less favorable, would intensify or relax this influence, while temperament would exert its just or morbid all-controlling sway of sentiment. Similarly, countries of sunshine and flowers, or the valleys, the mountains, the seacoast, the far-reaching plains, the preponderance of heat or cold, the lakes, rivers, bleak and fertile regions, regions of snow and ice, or sultry south winds, would each, according to its rhythmic nature, simple or qualified, awaken corresponding sympathies within the heart, which, if left untrammelled by ill-fitting theories, would spontaneously evolve a coördination of mass and detail, so normal, so indigenous, that it would instinctively be recognized as literally and poetically just.

Hence, this section may be closed with the broad sentiment that all is free and open, provided the general trend is in the direction of indigenous and sincere results; that when we become justly sympathetic, ward off extraneous and irrelevant influences, and make an earnest effort to reach real and intense results, we shall probably some day find a local answer to the question; an answer which none can gainsay. As for me I do not yet know what that answer is to be, though I believe I share with others a premonition of its nature.

Finally, assuming that the question is local, and specific in its import, and calls for merely an individual expression of opinion as to what is today and here in Chicago the just subordination of details to mass, I willingly make such explanation and answer as I may.

Candidly, I do not especially believe in subordination of detail in so far as the word "subordination" conveys an idea of caste or rank, with the involved suggestion of a greater force suppressing a lesser; but I do believe in the differentiation of detail from mass (the idea of subordination occurring incidentally and as of no controlling import), because this word symbolizes to my mind an idea which is very congenial to it, namely, that of an expansive and rhythmic growth, in a building, of a single, germinal impulse or idea, which shall permeate the mass and its every detail with the same spirit, to such an extent, indeed, that it would be as difficult to determine (not, surely, as a matter of arithmetical ratio, but rather as a factor in the total complex impression on the beholder), which is the more important, which in fact subordinate detail or mass, as it would be difficult to say of a tree, in its general impression upon us, "which is more to us the leaves or the tree?"—a question which I believe has never arisen. For I do not know that it has occurred to anyone to ask what is the just subordination of leaves to mass in a tree? What are the just ratios of leaves, branches and trunk? Should the leaves be large, and hide the branches, as in the horse chestnut, or should they be frivolous and dainty things, coquettishly exposing the branches? Should the trunk prevail, as in the proud and mournful southern pine, or should the trunk be short and sturdy, as the oak, with powerful gnarled and spreading branches, bared and grim before the tempest? It would be interesting if some one would kindly invent a precise formula for the growth of trees, so that we might forthwith declare any tree which grew at variance with the dictum to be altogether vulgar and devoid of savoir faire. For my part, I find their thousand ways all charming, and fruitful in suggestion. I graciously permit them to grow as they will, and look on with boundless admiration. For I know that they are simply trees; that they have no occasion to be ill at ease, or covert, or dyspeptic with introspection; therefore, I trust them, and regard them abidingly with love and veneration.

It may be said that I am at fault in comparing animate with inanimate things; but this is the very heart of a mysterious subject; for I insist strenuously, that a building should live with intense, if quiescent, life, because it is sprung from the life of its architect. On no other basis are results of permanent value to be attained.

The more I ponder the title question the more I am at a loss for a precise answer; the possibilities, even within the limitations of climate, are so manifold, and so native. But for the moment it suits me to favor a very simple outline, particularly at the roof, which is the part the most vulnerable to the elements.

Within this simple outline, then, I prefer such subdivision of the mass into detail as is strictly called for by the utilitarian requirements of the building; and that they should comport with its size, location and purpose. That the materials of construction should largely determine the special form of details, and above all, that there shall effuse from the completed structure a single sentiment which shall be the spiritual result of a prior and perfect understanding and assimilation of all the data.

In the absence of Mr. Jenney, who was appointed next in order, Mr. Cleveland took up the discussion.

L. D. CLEVELAND.

In replying to the subject in question: "What is the just subordination in architectural design of detail to mass?" I must acknowledge myself at a loss how to deal with so complicated a subject.

Architectural excellence consists in the judicious and skillful adaptation of an edifice to its specific destination, and in the appropriate and tasteful display of its interior and exterior ornaments.

Every building of magnitude should be distinguished by decisive and positive marks of its purport. The church, the castle, the mansion, the jail, the temple and town hall should each have its opposite characteristic form and features.

The Greeks and Romans were attentive to this principle; and the "architects" of the middle ages, though unrestrained by the rules and orders of their classical predecessors, very generally made a specific distinction between the edifice intended for religious worship and ceremonial uses, and that appropriated for habitation.

A critical examination of the buildings of any country or community displays, with a significant truth, the character of the people who inhabit them; and is a sure indication of their manners and customs. An inquiry must be replete with amusement and instruction, if pursued with a single and unerring determination to ascertain the truth; but not employed in the course of theory, superstition or any sectarian dogma, repugnant to reason and hostile to good sense.

The stately colonnade, and decorated frieze of a Grecian temple, or the rude and ponderous circles of Druidical customs can only be properly appreciated and understood by those who have diligently and scrupulously analyzed the history of the refined people who elevated the former, to excite our admiration, or the mysterious beings who reared the enormous masses of the latter to awaken our astonishment. In the one instance we have detail combined with its proper assimilation to mass; in the other we find mass without detail. Each is distinctive and has its own characteristics, and tells without words, the character and habits of the people who designed them, and have left these monuments to tell their story to other ages.

Every object of nature and art that is inherently grand or beautiful is calculated to afford pleasure to the human mind. The sublime and towering mountain, the romantic cascade, the interminable and restless ocean, the broad and translucent lake, are all highly interesting and impressive; but these are the inimitable works of an omniscient architect. Man vainly endeavors to mimic them, and advance the productions of art, to vie with those of nature. Though, however, his works be comparatively small and insignificant, they often excite the amazement and admiration of his fellow creatures.

Genius, aided by science, can produce surprising effects, can furnish to the curious and inquisitive mind ample sources of study and delight. This is fully verified in the ancient architecture of Great Britain, as well as in the splendid and much prized edifices of Greece and of Italy. It has long been the fashion, founded on prejudice, to praise the latter at the expense of the former; but the impartial historian and critic will award to each its proper and just share of excellence. Each style of architecture has its peculiar beauties, merits and defects, and each will afford important lessons to the judicious architect; but the man who tamely and frigidly copies either, will impeach both his taste and his judgment, and add but little to an "American style of architecture." We have many buildings where the architect has manifested both genius and science in their design and execution, where there is a happy blending of detail and mass; we find such in almost every city in our country, buildings that show the marks of careful study, and a proper distribution of mass and detail. They stand out bold, plain, and impressive, like a graceful and elegant female, dressed in a light and flowing drapery, as the latter adorns the former. We find such on our crowded thoroughfares, often surrounded with shady neighbors; but they resemble a dignified beauty accidentally surrounded and incommoded by a motley group of the rabble.

Finally: All buildings should, as far as it is possible for the architect to meet the requirements, tell their own story; whether they are intended for church or state, mercantile or other purposes; and in their uses much depends on the space that can or should be used to make them massive, or how much can be given up to light and airy detail. All structures must be massive enough to show that they are substantial, and the details should too be in keeping; being bold, clean and impressive, and all having a meaning.

If the designer's pencil did not run so easily into graceful curves and lovely flowers, that look so beautiful in the picture, if this point would get directed to bolder but subservient detail to the mass, those structures would have a lasting appearance, and enduring character, that would speak for a nation's grandeur, and perhaps in the future it would lead to an American style of architecture.

O. J. PIERCE.

What is the just subordination, in architectural design, of details to mass?

With Mr. Sullivan, I admit that if a categorical answer is demanded "I do not know," and that the question must ever remain an open one, and I partly believe that the influence of climate, natural and artificial features of environment, and the purposes which the edifice is to serve, ought to awaken "corresponding sympathies in the heart," which, in a word, would guide each designer to a direct, proper and artistic treatment of the problem in hand. We read in Sacred Writ that Moses received the tables of the law, and gave them to his followers, but have we an architectural Moses? and did Moses *only* receive the law? Then were this generation still in the gloom of Egyptian darkness.

No! Not Moses only, for the earnest searcher for truth is not always content to take it second hand, even from tablets of stone delivered to and by an acknowledged and revered leader; and the seeker for light sometimes prefers the sun, even to the sacred fire burning upon the altars of antiquity.

Therefore I say the climate, the natural features of environment, and the uses of the proposed edifice *should*, and sometimes do, awaken the

sympathies and quicken the imagination to that degree that mass and detail alike are but the natural evolutions of adaptation of materials to purpose.

And yet the wings of fancy must be trained before they can attain to lofty flight, and a knowledge of what others have done cannot but be of value to us who are working to accomplish similar results in our own work.

I agree with Mr. Sullivan in rejecting the belief of the subordination of detail to the sense of the suggestion of a greater force suppressing a lesser one. I do not think him in fault in comparing inanimate with animate things, but believe the comparison may be continually and most profitably made, if we but look behind the mask of nature's material forms and get a glimpse of the subtle, spiritual essence that in all things, animate and inanimate, answers to the call of a congenial spirit.

But this is not an exercise in inspiration, and I will not try to penetrate into the mysteries of metaphysical lore, nor trust myself in lofty aerial flights unless I am well anchored captive balloon.

The subordination of details to mass in architecture is, perhaps, analogous to that of individual traits of character, to the man or woman possessing them. Dignity, truthfulness, frankness, suavity, generosity, politeness, charity, these are details; but how essential! What would man be without them? One or two we can spare and still say "he is a man," but eliminate them one after another and what is the result? Take them all away and behold—an animal not a man.

So of details in architecture. They are the embodiments of unity, variety, harmony, continuity, repetition, alternation, color, texture, subtlety; all matters of detail rather than of mass. Can you spare them from your architectural achievement and be satisfied with the result? Eliminate them one by one, and when they are gone what remains? Architecture? Hardly. Architecture is to building what man is to the animal kingdom, of which he is an integral part.

Man is animal, and architecture is building, but as man is something more than animal, so architecture is something infinitely more than building. A building with a soul is a work of architecture, and if a building have a soul, its architecture will proclaim it to the man who has a soul, but may be silent to him who is soulless.

The careful student of the history of architecture cannot escape the conclusion that in the palmy days of that art and science, details have ever received the most careful study and the most loving execution. Witness the Parthenon at Athens, with its matchless frieze; the mediæval churches and cathedrals of Europe, with their carvings of goblins, saints and angels; rich in imaginative yearnings, and significant of the mysterious blendings of superstition and aspiration; the Alhambra, with its wonderful grace and perfection of decoration in all the minglings and interlacings of light and shade, form and color; the Buddhist temples, fretted with ornament from base to pinnacle!

Viewing these triumphs of architecture, wrought out by so many different peoples under all the varying conditions of environment, climate and religious faith, who will claim kingly supremacy for mass, and slavish subordination for detail?

"In the elder days of art,
Builders wrought with greatest care,
Each minute and unseen part;
For the gods see everywhere."

But while I turn back, lovingly, to feast upon the beauties of ancient and mediæval architecture; while I can look with a passionless, nay, sometimes even with an admiring toleration on those periods of renaissance—those epochs of continued and persistent endeavors to bring back the soul that had long since departed, and galvanize into new life, architectural styles of other generations and civilizations; I am yet no stickler for purist developments of either style or detail; neither, upon the other hand, am I constitutionally or otherwise iconoclast.

Recognizing architectural styles as historic and archeological rather than canonical, I am not prepared to admit that mere antiquity is any patent of merit, nor that novelty is of necessity vicious.

Doubtless, the composition of the architectural mass, as a whole, should receive the first and most careful study and consideration, and the details be unobtrusive, and in some degree subordinated thereto; but to what extent? "Aye, there's the rub." That is the question; but who shall give the answer? Mr. Sullivan says, "I do not know," and "That depends." Mr. Jenney modestly says that "the subject is one about which he does not feel that he knows anything worth reading before this association." Mr. Cleveland acknowledges himself at a loss how to deal with so complicated a subject, and yet, who will gainsay his conclusions? He says, however, that it has long been the fashion, founded on prejudice, to praise the architecture of ancient Greece and Italy at the expense of that of ancient Great Britain, and intimates his belief that the future art critic and historian will reverse this judgment; a belief that I am not entirely prepared to accept for myself.

Who shall give the answer? Replying, I say, no one! Each one will, in every individual effort in design, ask himself the same question, and will answer it in the masses, the lines, the surfaces, the material, the treatment he shall bestow upon each succeeding child of his brain. He will put himself in each new effort, and in each succeeding work from his pencil his contemporaries and posterity shall read his thoughts and aims and aspirations, whether they are worth the trouble of reading or not.

I think good architecture is a natural evolution of design out of a central and primary conception of utility and fitness. In this evolution, and first in order of unfolding come masses and generalities. Then comes subdivision of masses, and continued subdivisions (never losing sight of the principle of "Unity in Variety"), down to the minutest detail of construction and enrichment.

I think all good and genuine works of art (including, of course, architecture), as well as all works of nature, have, if I may use the expression, a dual character, whose dominating elements are masculine and feminine. The masculine element is the expression of strength and power. The

feminine that of grace, refinement and beauty. Each enhances the other, and each is dependent upon the other.

"As unto the bow the cord is,
So unto the man is woman;
Though she bend him,
She obeys him;
Though she draws him,
Yet she follows.
Useless each without the other."

Detail is essentially the feminine element in architecture; and, as it was said in the beginning, "It is not good that man should be alone," so say I now. It is not good that there should be strength without beauty, neither beauty without strength. Let the twain be made one by holy wedlock, and let no man separate them, for when separated in building the result is not architecture.

European architects sometimes condescend to praise American originality of conception, but usually end by severely criticising American detail. Perhaps their criticism is pretty nearly just in both respects. If so, in the matter of detail, is it not because detail is too often left to take care of itself, to "work itself out" in such manner as the knight of the jack-plane, chisel, brush, or other "Knight of Labor" may be competent and willing to put it in shape? The man lately advertised for in a technical journal, who can "vitalize ideas," if found at all, was not discovered in the conclave of any trade union; and even if he were, it would be somewhat too trusting to expect that your choicest artistic conceptions, oh, brother architect, would providentially fall into like hands for execution. Yet results seem to show that the average American architect is all too trusting in this direction. No wonder then, that where the conception is perhaps admirable, the details and execution are sometimes quite startlingly original. I have seen, not a thousand miles from this city, a group of emblematic figures of the Mechanic and Industrial Arts, executed (the word is well chosen) in stone bas-relief, in a manner that vividly called to mind the warm summer days, when, as half-grown country school boys we used to play truant to "go in swimming, down at Bob's Brook." If we had raided the hay field, the blacksmith's shop and the carpenter's bench, and possessed ourselves of the implements of their several occupations when all ready for the plunge, the likeness would have been the more striking. The artistic conception of the designer was all right, but the working out in detail was, on the contrary, quite the reverse.

Perhaps you have all had that client of mine (masquerading under another name), who wanted the woodwork "painted like oak," not grained; and who insisted that marble must be pure white "without streaks;" and the stained glass must be principally in "Cardinal Colors," to use his own expression. And now, having, as I am quite well aware, "boxed the compass" of this subject, touching it here and there on several sides (but not all), let me in closing generalize. I would have a piece of architecture resemble one of nature's masterpieces in this respect. It should arrest the attention of the observer, while yet a great way off, by its sky blot, or general mass. It should hold that attention with enhanced interest, as he approaches by the expression of purpose; by the just proportion of parts; by the variety, or perhaps by the uniformity, of corresponding members; by the judicious distribution of plain and enriched members and surfaces; by the harmonious blending of colors, whether of materials used or pigments applied; by the boldness of detail designed for distant view, and the delicacy of that designed for close inspection only. In approaching gradually, some additional detail of interest, not before seen, should constantly appear, to sustain and increase the interest first awakened; and the nearest view, and closest study, should discover no more defect or mote to mar the general impression than "my uncle Toby" discovered when he looked for the mote in the pretty widow's limpid brown eye. So mote it be. And such I conceive to be a just subordination, in architectural design, of detail to mass.

SUMMARY.

LOUIS H. SULLIVAN.

In summing up the results of this symposium, I am at once impressed with the independence and the courtesy of my co-laborers, as well as with the fact that their comments bear out my preliminary statement that each facet cut upon this gem would reflect its share of meaning and suggestion.

Mr. Pierce's statement, that a building with a soul is a work of architecture, and Mr. Cleveland's emphasis of the fact that a building tells a wordless story, are peculiarly agreeable to me, for they are statements which carry sincerity of purpose within the words.

I substantially agree with all that these gentlemen have said; though I gather the impression that Mr. Pierce attaches prime importance to mechanical and abstract explanations such as are implied by the words, radiation, repetition, unity in variety, etc. His right to this point of view I do not question, yet I cannot accept it, for myself, as a finality. His "masculine and feminine" simile, however, seems to me far-reaching in its implied analogies; recalling, even, the exquisite "correspondences" of Swedenborg.

Mr. Cleveland is upon catholic and humane ground when he calls for a recognition of the claims to poetic richness of the solemn and fateful work of the Druids—as indeed of the charms of story hid within the silent stones of many ages. With him I turn back thoughtfully to read the mystic and impressive volume of the past; leaving it as he does, with the heartfelt wish that we in turn may tell our story as they of old told theirs, in a language of simple and majestic fervor.

The subject of our symposium seems all bound up with general and special considerations of styles—its causes and manifestations—involving naturally enough a sentiment of solicitude regarding our future development in architectural art.

It is for this reason that I wish to add a word of my own, by way of conclusion, to forcibly emphasize that which I believe seems to us three to be the inherent suggestiveness of the theme.

This conclusion I shall mold under much heavier pressure of intensity that was given to the introduction, to-wit:

I value spiritual results only. I say spiritual results precede all other results, and indicate them. I can see no efficient way of handling this subject on any other than a spiritual or psychic basis.

I say present theories of art are vanity. I say all past and all future theories of art were, and will be vanity. That the only substantial facts which remain after all the rubbish, dust, and scientific—analytic—æsthetic cobwebs are brushed away, are these facts, which each man may take to himself, namely: That I am; that I am immersed in nature here with my fellow men; that we are all striving after something which we do not now possess; that there is an inscrutable power permeating all, and the cause of all.

And I say that all we see and feel and know, without and within us, is one mighty poem of striving, one vast and subtle tragedy. That to remain unperturbed and serene within this turbulent and drifting flow of hope and sorrow, light and darkness, is the uttermost position and fact attainable to the soul, the only permanent link between the finite and the infinite.

On this rock I would stand. And it is because I would stand here, that I say I value spiritual results only. It is for this reason that I say all mechanical theories of art are vanity, and that the best of rules are but as flowers planted over the graves of prodigious impulses which splendidly lived their lives, and passed away with the individual men who possessed these impulses. This is why I say that it is within the souls of individual men that art reaches its culminations. This is why I say that each man is a law unto himself; and that he is a great or a little law in so far as he is a great or a little soul.

This is why I say that desire is the deepest of human emotions, and that prudence is its correlative; that it is the precursor, the creator, the arbiter of all the others. That great desire and great prudence must precede great results.

This is why I say that contemplation of nature and humanity is the only source of inspiration; this is why I say that without inspiration there can be no such thing as a just coördination of mass and details. That, as there may be countless inspirations profoundly vital, so, also, there may be countless coördinations of mass and details unspeakably just. That material results are to be measured by their contained inspiration; that these results will phase as the inspiration phases.

I say that the whole inquiry as to the just subordination of details to mass, in so far as it contains the implication of a fixed rule, is simply a pedagogic scarecrow.

Nor does this signify a plea for lawlessness. On the contrary, inspiration, such as I have indicated, has too much of pathos within it, too much of the calm of nature's mysterious decadence, to permit the forgetfulness, for more than a passing moment, of this deep-down conviction, that an idea lives according solely as by its power and prudence it compromises with death.

If cultivated mediocrity is what is wanted, the title-question can be answered readily and specifically for each historic style. If the culture of action is demanded, then indeed we have a task before us to find an answer, which shall at best be painfully and laboriously worked out. For every problem is for us, as yet, unsolved; we are merely as pioneers in a primeval forest. Yet while our results can be but relative, they may be the fruit of great desires, and hence, may speak of greatness.

Therefore I say that each one must perforce answer the question for himself; and that his answer will be profound or superficial according to the reach of his inspiration, and the gentleness and power of his sympathy; and that this answer can be found in tangible form, only in his works: for it is here that he records his life, and it is by his works, and not his words that he shall be judged; for here he can hide nothing—standing to the spiritual eye as one naked.

Therefore, again I say, I value spiritual results only, and regard all else as vanity.

It is needless, I trust, for me to say my feet are upon the ground; though Mr. Pierce seems to hold the placing this discussion upon a psychic basis, as a species of ballooning. Here I differ with him radically, for I regard spiritual or psychic facts as the only permanent and reliable facts—the only solid ground. And I believe that until we shall walk securely upon this ground we can have but little force or directness of purpose, but little insight, but little fervor, but little faith in material results.

DISCUSSION.

Mr. Patton: This reminds me of the remark of Prof. Ware, of Columbia College, in speaking of the advantage to architectural students of works on architecture. He said: "It is a great advantage in looking through all the best works on architecture that, although you never find what you are looking for, you find a great many interesting things." If these gentlemen have not told us what it is, they have at least told us a great many other interesting facts that it is well to know. One of Mr. Sullivan's remarks seems to me of great value in directing our course, and it suits me exactly; that each building should be the development of a certain idea. Every design to be of interest must have both unity and variety, but it seems to me that we should put unity first, and that it should be the outgrowth of one vital principle. It seems to me that a great deal of our recent architectural design is too much of a conglomeration. I believe with Mr. Sullivan that we draw the simile from nature.

Mr. Pierce: It seems to me that the value of the styles is to show what people, studying as we are, have accomplished under certain conditions, and not what we should take for our guidance.

After some further discussion, the chairman called attention to some periodicals that had been purchased for the association by President Adler, and on motion of Mr. Patton, they were ordered taken care of by the Executive Committee. (Adjourned.)

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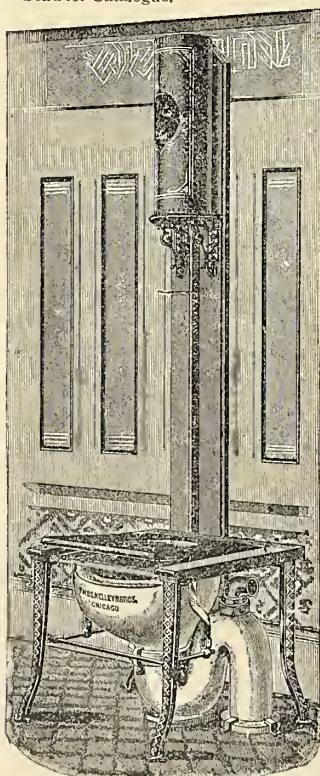
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THE report of the second annual meeting of the Illinois Society of Engineers and Surveyors, held at Champaign, Illinois, January 26, 27 and 28, is received. Beside the routine work of the convention, the papers read are given, all of them containing practical comment, not only in the direct work of the surveyor, but upon state and municipal economy. These, prefaced by a comprehensive and able address by President I. O. Baker, included papers on: The License System for Surveyors, by Samuel S. Greeley, of Chicago; followed by the reading of a draft of a bill for the licensing of surveyors, prepared by the legislative committee of the society, and substituted by Mr. Greeley for a bill with the same object in view, prepared by him. Drainage was discussed in the Separate vs. the Combined System of Drainage for Cities, by S. A. Bullard, of Springfield; followed by Topographical Surveys and Records for Drainage Purposes, by C. G. Elliott, of Tonica. Some Hints on Field Work in Drainage Engineering, by A. H. Bell, of Bloomington, and Just Apportionment of Cost of Drainage Improvements, by D. J. Stanford, of Chatsworth. The Boundary Question was discussed in exterior boundaries of townships, by F. Hodgman, of Climax, Michigan; Perpetuation of Corners, by J. S. Burt, of Henry; and Quarter-Section Corners on Township and Range Lines, by Z. A. Enos of Springfield. Other interesting topics were: Importance of Accurate Measurement in Surveying, by D. L. Brancher, of Lincoln; Pavements for Small Cities, by G. F. Wightman, of Peoria; Reservoirs for Railroads, Mills, Farm Use, etc., by S. F. Balcom, of Champaign; Oil and Natural Gas in Illinois, by T. B. Comstock, of Champaign, and Railway Trestles, by Edwin A. Hill, of Indianapolis, Ind. The immense importance and benefit to the state accruing from the meetings of this association, as well as the members themselves, is only estimated by the value of public improvements in the computation of the nation's wealth.

STRIKES, while not so general among the building trades this spring as last, have made their annual appearance in some shape in almost every city, east and west. This year the disturbing element to building progress has been the carpenters. That so generally intelligent a body of workmen should appear in this role may be surprising at first glance, but a moment's thought, with a slight knowledge of the circumstances, will explain it in some degree. Notwithstanding the large amount of skill necessary, and the quantity of tools used, compared with other trades, the carpenter has, almost without exception, received less pay in proportion than any of the skilled trades. This has led to discontent, and not being able to form themselves they have readily become subject to the direction and control of professional agitators. In no case that we know of has the demand of the carpenters been acceded to by the contractors, though the wages have in general been raised. This seeming paradox is explained by the fact that the master carpenters are willing to pay higher wages to capable men, but do not recognize the demands made by the men through arbitrary and irresponsible union leaders.

AGAIN, as the qualifications for the trade are so varied in character and degree that a uniform wage cannot be paid, and this is practically what is demanded when the minimum wage is placed at the rate paid for first-class men. If the true reason for the majority of the strikes among the building trades in this country, where there is seldom a

scarcity of work, and wages are higher than in any other country in the world, is looked for, it will be found in the indiscriminate mixture of the skilled and unskilled in all departments. The revival of the apprenticeship system in some form, and the refusal of employers to engage workmen who have not devoted a certain number of years to the acquirement of their trade, is the only permanent way in which these foolish and damaging strikes that occur every time an extra demand for labor gives an opportunity, will be stopped. Then the workmen will be able to state their wants and be heard, and if unions exist their wishes will merit the consideration of the employers. At the present it is suicidal for contractors in any branch of the building trades to submit to dictation from the trades unions, for this under the present conditions means the entire surrender of all rights as employers.

THE assumption of authority by the trades unions would be ridiculous, if it were not for the continual menace to the prosperity of this country that surrounds their present existence and operation. In the building trades they make little, if any, inquiry into an applicant's experience, and once a member, their false and pernicious alliteration, "each for all and all for each," gives every member a right to demand and receive the rate of wages they are pleased to establish. Among the workmen this system tends to destroy all ambition to acquire greater proficiency, and where one is more skillful than his fellows, he is not allowed to use it, but is compelled to work in unison with his slower neighbor. With the employer, it tends, and in fact the constant endeavor, and one of the real purposes of the union, among the building trades, is, to take the management entirely out of his hands. In Chicago the master masons are tied hand and foot, and it was only a few days since, that a member of that association, through ignorance of the rules of the union, gave some occasion for offense. He was informed that he had been fined the sum of twenty-five dollars, and before he could continue his business was obliged to go to the union headquarters and humbly ask pardon for the alleged offense, pay his fine, and receive permission to continue business. But this state of things cannot last. The boycott is already a thing of the past, and the law's delay will soon also overtake the "walking delegate" and "shop steward," and it will be found that we live in a country of equal rights. The more intelligent of the journeymen see the damage all this is to their interests now, and the time is not distant when the employer and employé will be found consulting together for their mutual welfare and advancement.

THE investigation asked for by Architect S. M. Randolph in the Illinois State Soldiers' and Sailors' Home matter, the circumstances of which we gave a general account two months ago, after being practically refused by house and senate, has again been brought before the house, and with somewhat better success. Upon a resolution (introduced several months ago) by representative T. C. MacMillan, a committee of fifteen was appointed to take charge of matters pertaining to the Soldiers' and Sailors' Home and the Soldiers' Orphans' Home. This is a standing committee, and distinct from the standing Committee on Charities, Mr. MacMillan rightly holding that these two beneficent institutions should not come under the head of "Charities." This committee appointed a sub-committee to go to Quincy and look into the charges made against the trustees, Messrs. G. Rowland, L. T. Dickinson and Daniel Dustin, by Mr. Randolph, and report back to the full committee, that the advisability of ordering the investigation asked for might be considered. This com-

mittee, consisting of Messrs. Barger, chairman (who is also chairman of the committee of fifteen), George McKinley, Taggart and Eastman, went to Quincy and heard the trustees and Mr. Randolph explain their respective positions. The stenographical report, which covers the entire proceedings of the committee, shows that in a large number of cases the architect's specifications have been charged, and the use of a cheaper material substituted, "at no increased cost to the state," as the trustees invariably explained. It is noticeable that in no case where a change was made was a rebate made by the contractors to the state.

SINCE the above was written, the report of the sub-committee has been made to the house of representatives, and in view of the recorded proceedings of the sub-committee's meeting at Quincy, it is truly astonishing, as it unreservedly whitewashes the entire action of the trustees and indorses their work. Meanwhile the record of proceedings shows the committee to have been without authority or power, shows further that no expert witnesses were examined, and that what they report as having "thoroughly investigated" was not investigated at all. They travel out of the way to "find that the construction of the building is in strict compliance with the plans and specifications, except wherein it was impossible for the contractors to comply therewith, by reason of the plans being of such a defective character that it was utterly impracticable." The record shows that in many instances the trustees admitted changes had been made without any necessity of the kind mentioned, and gave as reason for so doing that they had the legal right. We can find no evidence whatever that any defect had been found in plans or specifications, unless we conceded the contractor to be the umpire in such matters. He claimed he could not carry out the design as made by the architect; this the latter denied. No expert was called to pass upon the matter, and the committee must have considered themselves experts sufficient to judge of the questions in dispute.

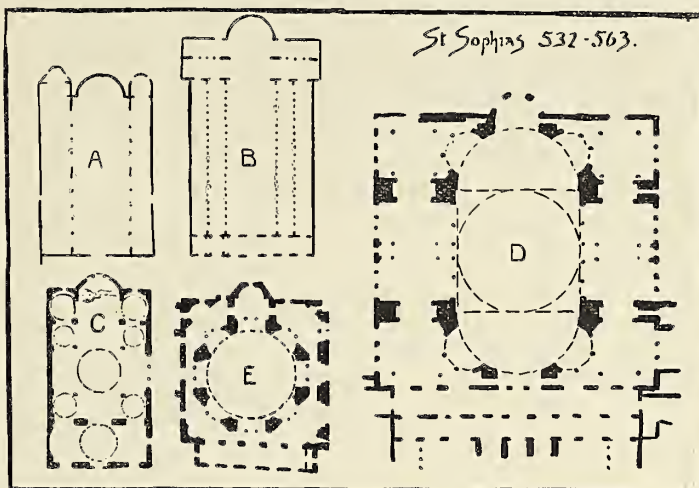
A RECENT detailed report of additional expenses which these trustees have incurred, besides large salaries to officers, etc., among many other construction expenses, allows \$3,000 for one additional boiler (the accepted bid for the four boilers in use, which, according to their report, are deemed by the trustees to be exactly what was required, was \$3,200), and \$87,600 to be expended for twelve cottages, the architectural services upon which is scheduled at \$6,000, or not quite two per cent over the regular fee for architectural services of five per cent. These expenditures have been ordered since the discharge of Architect Randolph, and add additional force to his demand for an investigation, which should be insisted upon by the people of the state, not so much that an architect of unquestionable ability and repute may be vindicated or condemned, but because there is enough evidence to warrant the thought that it is possible that the state's bounty to its soldiers has not been judiciously managed, and even the sacred character of their trust may not have kept these servants of the people from allowing the jobbery that has become so common a feature in public work in this country to taint their management of the building of this home for soldiers. It is the duty of the representatives of the state who appointed these trustees, and the governor who accepted and appointed the architect, to look into the matter of their stewardship thoroughly. The people should know how their money has been expended, and the architectural profession whether public work can be done and the architect protected when he rebels against unwarranted letting of contracts over his head and the alteration of his plans.

The Development of Byzantine Architecture.*

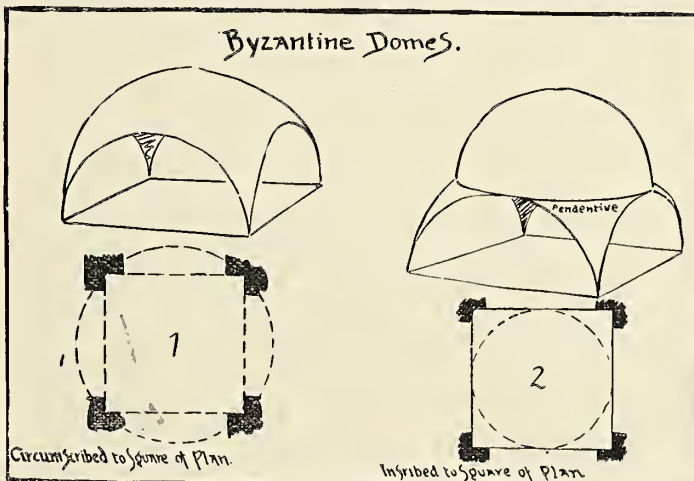
BY RICHARD E. SCHMIDT.

ARCHITECTURE, as the ideal expression of the life of a people, partakes of its migrations and fate. The people of Italy, in the early Christian times, were still under the influence of old Roman traditions, the dogma of the new teachings not having the cause nor the power to remove them. The æsthetic feeling nourished by the then existing architectural works, as witnesses of Roman greatness, and the innumerable fragments of antique forms and articles, kept the love of antique art awake, so that the development of new compositions in those places which had been especially marked by their old art was stagnant. But Italy was not favored with a quiet political life; moreover, on account of its weakness, a long list of invasions and disastrous wars was its lot. Byzantia could not forget the former unity of the Roman Empire, and Germanic tribes considered the Italian fields none too good for settlement, and themselves not too lowly to govern the former conquerors of the earth, and the lands which that great nation still owned. Although Hellenic-Roman civilization influenced the barbarians very forcibly, it being the stronger, it could not continue in its peculiar manner of thought and feeling without undergoing some material changes. We certainly do recognize a few individual changes in the architecture, but they disappear when the entire new, as a whole, is compared with the entire old traditional form. Although the changing of a manner of thought is closely allied to the changes of society and politics, in the arts a new form of expressing a thought is not so quickly found, especially in architecture; it requires a long period of quiet, systematic training before a new form has been developed out of the old. Certainly the Germanic tribes who took possession of Italy were not without a culture, and civilization art practice; but they had so great a regard for the magnificent monuments of old Roman art that they, as conquerors, acknowledged themselves as being conquered by these, as the Romans did to the culture of the Greeks centuries before. Yet there, where the influence of antique art was not so great, it was necessary to work with more originality, but without withdrawing completely from the above-mentioned influences. In this manner there sprang into existence in the many parts of the old Roman Empire changes in the architecture, which do not deny the early Christian character in its entirety, but differ so materially from each other that each can be called a separate style of architecture; but are generally all erroneously termed Byzantine. These are the true Byzantine which followed the founding of the East Roman Empire and its capital, Byzantia, or Constantinople; Central Syrian, influenced by orientalism and its peculiar materials, and the Roman-Germanic, including the Ravennation art. In the Orient, as in the Occident, Christian teaching regulated the rebuilding of the social state. In the latter, the church managed to hold its freedom of development; but in the first, she soon became closely connected with the state. For political reasons, Constantine the Great had himself baptized, and he favored the church; and for political reasons the church and state remained bound together, thereby making Christianity the religion of the state, but subordinate to it. But the church, with its new forms and emblems, had not yet penetrated the hearts and minds of the masses; for that several centuries of teaching and experience were necessary. The only immediate noticeable change was that the sign of Christ was obeyed, it having taken the place of the Roman eagle. Under the letters of the law, the religion of freedom changed to a religion of servility, a servant of despotism. Egotism alone governed the action, not the human feeling of love. The heart, the imagination, dared not warm itself to free thought, for how easily could they have rent apart the ties that held together the hollow building of Byzantinism! This distinct direction, systematizing their entire life, was defining for the principle of Byzantine architecture. Fancy was bound with iron bands to the laws of forces governing the materials and the construction, so that their buildings form stone mathematical demonstrations, in which each member requires or carries another. They built with sober good sense, only here and there relieving the plain stone walls by a charming capital or a delicate molding, thereby bashfully betraying that at least the freedom of æsthetic thought, perhaps formed by the near examples of Greek art, which is concluded because of the sharp cut of the ornaments, shows, in spite of all restraint, that it has forced a right of existence. The splendid mosaics, regarded as works of art, have no doubt as to their true value, and are no compensation for the lack of really perceived and created forms of architecture. The Byzantine state was locked into itself, developed one-sidedly to a certain height under Justinian; after him it decayed more and more. The architecture mirrors the changes faithfully. Although masters of construction, Byzantine architects confined this to certain forms, and developed these to a mathematically clear, safe and daring system, to gradually recede with their technical skill and forms under the pressure of social and political disorder. Byzantine architecture rested on scientific knowledge; it was confined to this, rose and fell with it. Until the time of Justinian the basilica was the leading form for Christian churches; also in the Asiatic and African countries; but no one style was reigning; everything was a terrible jumble of the corrupted Doric, Ionic, Corinthian and Composite; columns of all orders pillaged from antique temples and buildings found new places for usefulness, without any regard of diameter or height, the latter discrepancy being regulated by clumsy bases, or of leaving away an entire base. Even the different pieces of an entablature were often taken from different buildings of the different orders. The strongest feeling for architectural style which has ever existed had at last totally disappeared and given way to an indifference to the thorough study of harmony which had once existed, now only showing itself here and there, but in a crude manner, in this conglomerate of antique and new elements of form.

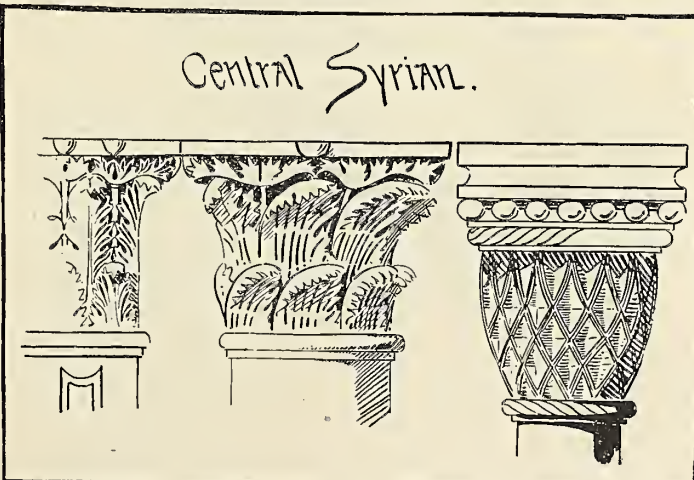
The division of males and females in the church led to the building of side aisles (see sketches A, B, St. Clement's and St. Paul's, Rome), but



this was only strictly adhered to in the East. As Justinian's government rose to its highest power by successes in the outside world, and by regulations in the interior, art sought to lend a resembling expression of grandeur and greatness. Involuntarily the architect's eyes were turned back to a time and place when the state of organized power was similar, that is the time when Rome was an empire. Then the dome expressed the times most adequately, for the great and beautiful Pantheon with the other immense domes in the baths of Caracalla were built in the flower and greatness of the Roman Empire. The dome in its abstract and sublime



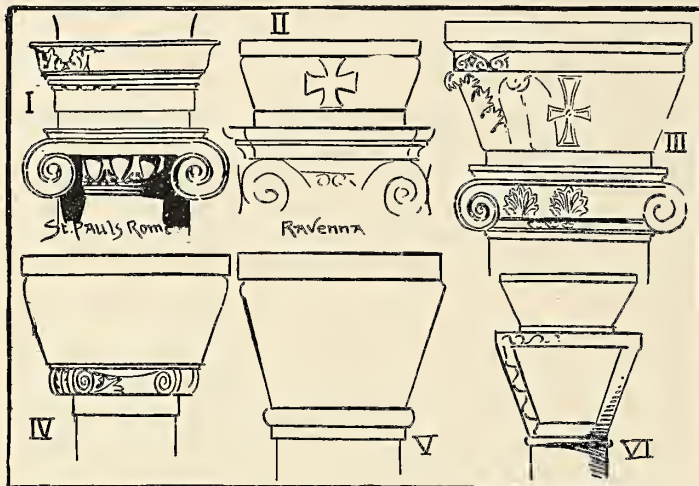
beauty was also to the Byzantine taste and feelings; it was not only copied at the Golden Horn with its buildings of circular plan, but it was also carried out in connection with the octagonal and square plans (see plans C, E and D, church of the Holy Mother, St. Sergin's and Bacchus, and St. Sophia's, Constantinople,) mathematically safe and systematically membered, so that the Byzantines have furnished the rules in the building of domes and their requisite support to this day, for in the use of the unbroken arch in architecture they were the greatest masters. The development of a dome on a square plan is possible in two ways. The



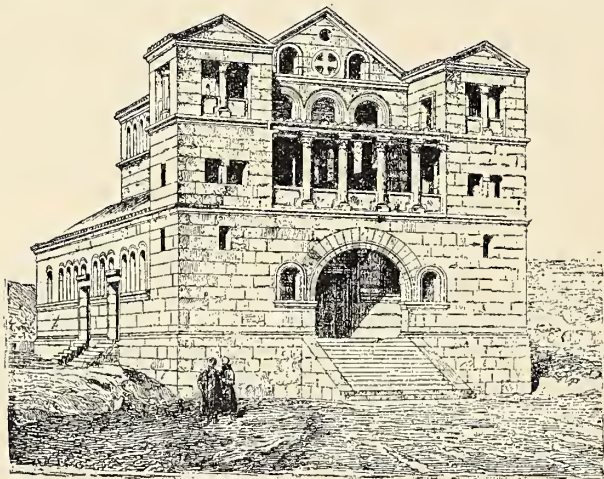
first is, if the plan of the largest arch of the dome is circumscribed to the polygon of the plan of the supporters (see sketch 1), the second is if it is inscribed to these (see sketch 2), thereby necessitating the use of spherical triangles in the angles of the supports, called pendentives, to fill in the intervening space. This is undoubtedly the grander of the two methods, for it allows of a complete dome, while in the first method large sections are cut away by the intersection with the side walls. This first method was

*A paper read before the Chicago Architectural Sketch Club; illustrated by drawings reproduced from standard authorities. Revised by the author for THE INLAND ARCHITECT.

much used by the Ravennatians, for instance, in the "Baptistry of the orthodox" and in "San Vitale" at Ravenna. The second method was the one adopted by the Byzantines of Constantinople; the possibilities of this manner are shown by the great St. Sophia's, with several similar but smaller structures. The plan had gradually changed from the basilica to a Greek cross with a large central dome and many niches and arcades, below. The four immense semi-circular arches between the four arms of the cross and the dome were directed to the four points of the compass,



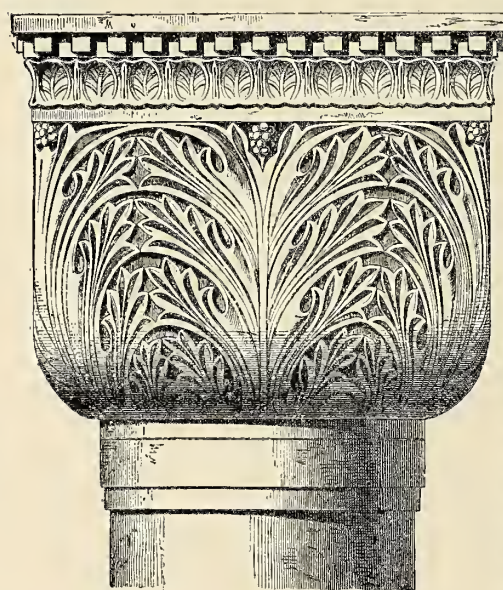
the arms corresponding to the nave and apse ending in half domes and the transept arms in walls pierced by many windows, the arms proper being roofed by barrel vaults. The description of St. Sophia's will be sufficient for the construction of the majority. After the old church built by Constantine was burnt in A.D. 532, Justinian decided to rebuild with a splendor unparalleled, by the help of his architect, Anthemion von Tralles. The corner stone was laid within forty days of the fire. Von Tralles was supported by Isidore von Millet. The immense building, and the short time, required large sums to be raised hurriedly, causing all the provinces of the great empire to be taxed. The old temples of Greece and Asia were plundered. In six years it was completed; 22 years later an earthquake destroyed the eastern half of the great dome; it was immediately rebuilt, but 25 feet higher, and was dedicated on Christmas day, 563. The immense central dome, 105 feet in diameter, is supported by forty ribs, projecting about four inches at the spring, and gradually merging into main surface as they rise. These ribs, the principal arches, belt courses of the dome and the main piers, 75 feet in height, to the spring of the pendentives are of cutstone. All the walls and remainder of domes are of brick of a variety of shapes; some are 1 by 2 by 27 inches. The statement of some writers that the domes were built of pumice stone or a light, porous brick, has been proven to be wrong. The inside height of dome from the floor is 180 feet; the thickness of the dome at the spring is 30 inches, and in the crown 25 inches. The cornice projecting on the inside at the spring was built wide enough to afford a passage for the lamp-lighters, almost 130 feet over the floor, but without a railing. The interior was treated inconstructive, that is, covered with marbles and mosaic. The exterior was very plain, either showing the plain brick or covered with stucco.



The Greeks and Romans always sought prominent positions for their temples and other public buildings, first building a stylobate, usually a flight of steps, continuing entirely, or the greater part of the distance, around the building. The Byzantines did not look for a prominent piece of ground, and the building was only a single riser above the ground. A small water table takes the place of the stylobate; at first this was plain, but later molded and carved. The exterior walls, as mentioned before, were principally of brick, but sometimes the walls and arches were constructed of alternating course of brick and stone, causing one to think of the Moorish work done about seven centuries later. In Central Syria (see 3) the edifices of all kinds, even the smallest dwelling, were entirely of stone; large, well-cut blocks, arches and domes of great span were common, and several stone doors swinging on pivots are yet extant; here the vertical section of the domes were often the raised ellipse.

While in Syria all the material was new in Europe, everything possible in the second-hand line was at first made use of, fluted columns next to plain, or two thirds fluted was common. In St. Sophia's there are eight green antique columns taken from Ephesus, and many dark-red porphyry columns from the Sun Temple of Aurelius, in Rome. They immediately recognized that the arch, having a section similar to the Roman architrave, resting directly on an Ionic or Corinthian capital, formed a very poor junction; at first they interposed a block molded as the arch or architrave (see I), later a pyramid frustum, and ornamented by a cross or other emblems (see II). This pillow block was proportionally small to the capital, but it gradually grew in size until it had completely supplanted the capital (III, IV and V); the ornamentation grew in richness with the size of the pillow block; the latest examples are entirely covered by a network of vine. The very latest frequently have two blocks, one over the other (VI). The interior molded courses and entablatures were all richly carved, a cymatia with overhanging acanthus, the corner with a guioche pattern, the bulging frieze by a large meandering acanthus, high and squatty egg molds, and all these separated by small bead rope molds, although these richly carved members had lost the æsthetic meaning which the Greeks had given them, for they were placed together regardless of size or æsthetic strength; they still possessed great beauty, lent them by the fine workmanship and character of the carving. The arches were also membered and carved in the same manner. In Syria a charming method of supporting an overhanging interior cornice was much used; this was to build colonettes below supported by carved corbels; while speaking of colonettes, I may mention that they seldom had bases in Ravenna, Venice, Constantinople or Syria. The roofs of the smaller buildings were covered by the old S or the channel tiles. The Mausoleum of Theodoric, at Ravenna, was roofed by an immense piece of saucer-shaped concrete, lifted into its resting place by a number of square perforated blocks, just above the outside edge, that are now acting as ornaments. St. Sophia's and the other large churches were protected by a heavy sheet of lead.

Plain white, and beautiful combinations of color and form in marble,



even the floors, when marbles were too difficult to be had, almost the same effect was gained by the use of colored cements.

Mosaics made of glass covered large wall surfaces and covered the entire domes; the ribs of the latter were so slight that they were hardly noticeable. Where these were wanting, they were replaced by decorated constructive lines. The immense mosaics in St. Sophia's are now covered by whitewash. It was only by long and persistent pressure brought to bear on the Turkish Government, that the Italian, Fossetti, was

allowed the privilege of washing and drawing them, in 1847. They were re-whitewashed, but not as well as they had been, for the large picture of Christ, in the apse, which the Mohammedans wished to obliterate, can be faintly but distinctly traced. The windows are divided into small lights, for the simple reason that larger pieces were not to be had, and not a craze as it is today. Perforated marble slabs were much used; at first only simple geometrical figures, as squares, circles and crosses, gradually growing richer and richer, until the highest examples at Ravenna are reached; these were filled with leaves and meandering vine, the light falling through the open spaces.

Molded and carved casings, with carved splayed jambs, finished the windows.

The carving is flat, very sharp-cut spiny leaves, completely filling the space within its borders (see 4); the acanthus and smaller leaves resemble the regular Greek acanthus; if any difference, it is that the single parts are more spiny; the ribs are incised (see 5) instead of being raised. These ribs are beautiful flowing lines in both large ornaments and borders, and are therefore the principal, necessitating the drawing of them at the beginning. No spine of the leaf is left to stand out free, nor to lap over any other part of the leaf, but its tip touches a line or meets with other tips (see 5.) Large surface ornaments are drawn with a center, either a cross, an emblem, or a rosette. The borders are a guioche or a meander.

Many of the carvings were accentuated by the use of color, the centers and leaves in gold, ivory white or a greenish white, the spans peacock blue, a rich dark red or a chocolate. The borders of the marble were left their natural color.

The same palette of colors, that is gold, ivory white, greenish white, peacock blue, dark red and chocolate, lent the mosaics their rich appearance. Animals and birds were at first only used as decorative forms by the central Syrians, but in St. Marks, of Venice, and other buildings of as late a date as that they occur very frequently.

The photographs, engravings and tracings which have been collected to illustrate this sketch will give you all as good an idea of the style as one can obtain without seeing the originals.

Illinois State Association of Architects.

THE regular monthly meeting of the Illinois Association of Architects was held Saturday, May 7. In the absence of President Adler, the meeting was called to order by 1st Vice-President, S. A. Treat, at 2:30 P.M.

On motion of Mr. Cleveland, the minutes of last meeting were accepted without being read by the secretary.

Mr. Clay: I wish to say regarding the symposium that two of the members are not here. I have their papers, however, and they have requested that the secretary read them.

Mr. Clay then read the opening paper of the symposium, entitled "To what extent is it necessary in design to emphasize the essentially structural elements of a building."

W. W. CLAY.

Perhaps no subject in the discussion of architectural design leads us more thoroughly into a consideration of its moral condition and tendencies, and of its honest rights and privileges than that to which your attention is especially invited by the symposium of today. If I may be permitted to take the bull by the horns immediately, and, without a further introduction, delve into the heart of the matter by attempting at the very start to solve the riddle, I would answer in a broad and general way, and as a text to build an argument upon, perhaps, that it should be demanded of design that the emphasis be placed upon the essentially structural elements of a building should be at least a polite acknowledgment of their several and individual existences, and a candid recognition of their worth and usefulness. This is either fortunately or unfortunately, too frequently not the case. For alas! or happily (it is not for me to say) how often has the structural element been called upon to pose as something else, or hide itself entirely, in order that a freak of selfishness may find solution and development?

It will not be the object of this initial paper to discuss the merits or demerits of any style of treatment, or seek for architectural harmony between the parts or to define it, or wage a wordy war against veneers of stone or brick or slate, or breathe contempt upon the use of sheet-iron, tin or copper, or even open up the question as to whether the designer should confine himself to giving grace of form and beautiful enrichment to structural elements alone, omitting all adornments, all appendages, all extraneous or superfluous conceits that may not constitute a useful or component part. This latter may be, and doubtless is, though fraught with difficulty, the truest, noblest, highest form of architectural design, but it is not to be considered here, except, that if there be design at all, it shall so treat its subjects that they do not seem composed of what they are not, and do not seem performing functions which they do not.

From such thought as I have given to the subject, I am inclined to this opinion: That within the reasonable limits of the question there are at least two principal divisions under which it may be rightfully discussed; to these, with kindred thoughts suggested by them, I will confine myself at present, while those who follow me may take different ground. We may then, perhaps, consider design in building and its relation to the structural elements under these two general heads:

First. Those considerations which have reference to the material used, as *represented* by the design.

Second. Those considerations which have reference to the implied strength and fitness of the construction, as *represented* by the design.

I may say here by way of explanation, that I have chosen the above division of the subject because I believe it to have a more important and vital interest than any variation of the ancient dictum, which calls upon us to "decorate construction and not construct the decoration," and because I think that if the principle of "truth" is kept well defined before him, the designer needs but little else to guide him, and I trust you will be satisfied if in what I have to say or have said, I leave it to yourselves to find the limits of design in this connection by declaring only on what ground it may not stand, and leave you all the earth beside to develop in.

It has been told to me that the celebrated artist, Turner, in reply to certain adverse criticism, once remarked, that if it took two suns to produce the light and shade he wanted, he would have them. I presume that with no better cause, he would have had a half dozen, if the two were insufficient. I may be misinformed regarding persons, but the anecdote adapts itself to what I mean, and illustrates in art what I have chosen (for lack of better phraseology) to call "a freak of selfishness," and which in architectural design as considered here consists, first, in a misrepresentation of materials used, and secondly, in a denial of the true construction. The former is usually, though not invariably, prompted by a desire to produce a given form, detail or effect, upon a more economic basis. The latter by a determination to retain a given form or detail at *any cost*, so that, for instance, a real support is hidden and the favored form appears to do the work. While it may be undignified, and not at all respectful before an audience of those who know too well already, to quote examples, still I am compelled to say, for sake of illustration, that I consider an element of iron, *cast* to imitate wrought work or stone, and an arch without intrinsic strength or lateral support, its load sustained by hidden beams, for instance, as fair examples of the two principles of deceit above alluded to.

In the one case, we find the real material unrecognized, distorted, or misrepresented; in the other, the construction covered up and practically ignored. I have asked for recognition of the structural elements, and I have shown that recognition is not always given them, and would draw the inference that this lack of recognition is not from necessity, but in a great degree from a desire to indulge a fancy; sometimes at lesser and sometimes at greater cost, but, "put money in thy purse."

We must admit, however, that this power to evolve the beautiful, this power which has turned primeval building into architecture, this power which has given so much of life and soul to men's creations, should have some scope and privilege. But to what extent, and with a hope of what

advantage to itself or us, shall it be permitted to conceal the truth or formulate a falsehood?

It is said, the first impulse of human nature in regard to things of fact, is to declare the truth, and that falsehood is the result of due deliberation, being prompted by a consideration either of the disadvantages which might follow a disclosure, or of the benefits which might be derived through misrepresentation. The former incentive to dishonesty, leading as it does, with its inherent selfishness, to a cowardly avoidance of penalties and punishments, has little to commend it for consideration, as, however right may have been the deed, its denial robs it of its self-respect. But the latter incentive in which may be discovered that problematic principle by which the end is made to justify the means, and which for centuries past has been a firm belief, if not a ruling passion among the few whose duty it has been to educate the morals of the mass; this incentive gives a field at least for some discussion, although it may not yield us the conclusion that "the truth, the whole truth, and nothing but the truth," is not as absolutely essential in some other things as it is upon the witness stand.

And here it would be well, perhaps, for us to pause and briefly trace, if possible, what effect a code of morals such as this may have upon design in architecture. Upon the ground that falsehood in design is to a great degree a freak of selfishness, there is clearly naught but condemnation for the act; but upon the ground that beauty, however false, becomes a public educator in form, in color, in detail, regardless of construction and of material too, so that the form and color and detail are good, so that they come within the modest means of those who may be taught, so that each home is brightened by the teaching; the selfishness is turned to sacrifice, the means seem justified, and the artist pushes on—to what? alas! to what? I fear, to license.

The story of the ages has been told; the impulsiveness of innocence, the temptation of ignorance, the violence of license, the necessity of law, the threat of punishment, the promise of reward, the doctrine of salvation, the decline of fear, the development of reason, the dethronement of superstition, the establishment of freedom, the inspiration of truth.

For as we take this search along the pathway of progressive morals we may discern so near at hand that even now we seem to be within its very precincts, inspired truth, truth on which no longer hangs the mantle of the innocent impulsiveness, which, knowing naught of evil, evil doeth not; truth, which, with a firm belief that error unacted leads on to error without hope, would suffer *all* than shield that error by a falsehood; truth, deep-seated in the heart, of which there dwells the strong conviction that no dissemblance, however rich may seem its fruit today, can ever nurse that fruit to ripeness, can ever hope for pleasure or reward or gratitude in such an offspring.

Truth, established by the line of truth, which, arising amid these struggling efforts of the past, finds in itself, and in itself alone, the rich experience, the manly courage, the steadfast purpose which constitute the only hope, the noblest guidance, the highest leadership.

And in design today I think we see the influence of such thoughts as these; thoughts which demand expression of the truth; thoughts which though well-nigh overwhelmed by more false practices than ever known before, convince the thinker that the turning point is near at hand, when each must seek a refuge on some safer shore, where, guided by a strict integrity, his genius may endure by living works in which no lie is found, no truth concealed, and yet no beauty sacrificed.

At the request of the secretary, R. C. McLean read Mr. Baumann's paper, that gentleman being one of the absentees.

FREDERICK BAUMANN.

In a measure I agree with Mr. Clay, when he admits that "giving grace of form and beautiful enrichment to the structural elements alone; omitting all adornments, all appendages, all extraneous or superfluous conceits, may be, and doubtless is, though fraught with difficulty, the truest, noblest, highest form of architectural design." I should not, however, as he does, entirely exclude such considerations from our subjects proper, because they seem to me to constitute an important part thereof.

I do not believe in the necessity of giving an express emphasis to structural elements, but I do believe in harmony between structure and expression, and say: to the real part, useful structure, no express emphasis; to the ideal part, artistic expression, no subordination. Let us consider this to be the ideal fundamentum to what we comprise under the name of architecture.

To strengthen this consideration, and impart to it a broader basis than here outlined, I will, in translation, adduce the concluding sentences of the introduction to Wilhelm Lutke's "History of Architecture." They read:

We are enabled to prove in every work of architecture the existence of the two elements: the really necessary and the ideal, which united make up the work of art. But this is expressly to be thus understood, that neither can exist by itself, and that both must be regarded as welded to a perfect unit. It is foremostly the practical end which determines the arrangement of ground plan. But the harmonious perfection of the work is already a part of artistic activity proper, the more so, since it cannot be effected without regard to the manner of covering rooms. This covering is at first likewise a result of practical demands, which become manifoldly diversified in accordance with the various needs of divine devotion, of customs of the people, of climatic condition of the country, and of the kind of material to be employed. The invention of that construction, on the other hand, which complies most perfectly with the end sought is to be regarded as a deed of architectural genius. This genius enrobes his creation with such perfected sanction as to enable him to disclose before the eyes of all, the ground plan and construction in language of form such as is beautiful and clear to general understanding; and by means of proper membering, to pose the building object in the light of a live organism which establishes even its ornamentation as though sprung from the power of a natural law.

But this is highminded theory, good for maxim and amusement, very much more so than for daily hard and dry practice, in which it seems inappropriate to regard architecture as any more than a useful art. A skilled and talented practitioner might oftentimes reach the border of fine art proper, yea, even enter its very gates. Does it follow therefrom that the entire list of practitioners in the architectural brotherhood, though elevated, is lifted from its standing?

In every, even the most ordinary of useful arts, it is possible to reach the limit of fine art and even pass beyond. The most ordinary wearing apparel, of every sort, begins the list, and among the highest class of

articles in this line—have many of them not even been classed among the objects of fine art. Consider in this light the other, and, if I dare say so, the highest branches of mechanical art; has human invention therein not likewise excelled in a degree which demands fullest admiration? Consider the art of tapestry, the art of locksmithing, the arts of engine building and ship building, of instrument making, and others, is there one in which the goal of fine art has not been approached or even reached? Look at the art of armor smithing. Before the invention of gunpowder in the age of the "Minne," the knight was carefully anxious to exhibit himself in finest appearance before his lady. She was equally anxious to have his armor commodious and strong, to allow agility and to withstand the brunt of battle. Thus the artisans became anxiously solicitous to produce an armor fitted for such demands, and the final result was perfection of fitness and strength combined with absolute grace. Armor relics of those times are to this day considered among the highest objects of medieval art, fine art. We Americans in particular, have a right to regard mechanical arts with us as master arts, for it is acknowledged in every quarter of the world that, at all events, with nearly all of them we have passed the line which may be drawn between useful art and fine art, more so than has any other nation.

Does this contemplation grant to us any sound reason to think or to fancy that we, as architects, are of a substantially finer mold than are the artisans, so called? The art itself is broad and complicated, but where are we? Do we even hold as high a standing in our profession as those men do in theirs? Can we boast of our profession as such, although the mere mechanical part of our building art has in some measure, at least, outstripped what we meet in other countries? The time may or will come, yet at present we are wanting.

I cannot here resist the temptation to descend in this contemplation from man to the highest order of animals. Has there not ever been poetry in the song of the lark and of the nightingale? Do we not find quadrupeds and birds formed or feathered to ever attract our devout admiration? If Darwin is correct, and why not? both animal song and garment are acquirements won through the agency of long, long ages in the pursuit of, I will say love, the same subtle, sweet agency, which, as we have seen, molded knightly armor in historic time.

From the foregoing are we not justified in the assumption that the architect of the present day must take his place among the artisans, and drop all claims to any other distinction or dignity which is not the exclusive property of the individual; and further, that no one should feel lowered by the truth of this? We live, as you well know, in a free country. There steps, as in all other trades, by the side of the spirited, noble-hearted, hard-working artisan, artist that he may be, the bare bungler, trying to eke out a living upon false pretenses, so often considered by ignorant builders to be good coin. A bungler or his relation may even have a new style of his own patent process. The honest dreamer may, in a fit of vanity, believe that he is on a straight path to an American style of architecture, wholly forgetting that every country in the world has, in a degree, at least, its own mode (or style, so called) of building, suiting the habits of people, and being subject to development which corresponds with mode of living and business pursuits. But all this is far off from a style proper. It may, after a long lapse of time take place, that people then will speak as we do now in regard to former eras, that there then was a particular style of building in vogue, from and in consequence of which those and those new forms and new manners have sprung. Ruskin, as may be observed in many parts of his many works, is rather bitter on invention of a new style. Thus in his "Lamp of Obedience" he says:

A day never passes without our hearing our English architects called upon to be original, and to invent a new style; about as sensible and necessary an exhortation as to ask a man who had never had rags enough on his back to keep out cold, to invent a new mode of cutting a coat.

Coming at last to the topic proper of our symposium, I find it convenient to classify buildings somewhat roughly, and in accordance to their intended uses. I silently exclude, as a matter of course, the commonest structures as being wholly below the scope of art.

First. Manufacturing buildings. The time begins to arrive when, in a new country like ours, people regard this class of buildings as deserving of consideration beyond their mere technical use. Wealth readily acquired, prompts thinking builders to take into consideration two points, namely, an educational one and an advertising one. The one wishes to establish a wholesome example; the other, to furnish their business. The time may be foreshadowed when every builder will feel himself under a moral command which bids him to build with due regard to general decency. With manufacturing buildings the tendency must prevail, and naturally does everywhere, to show all and every material in its appropriate mass, form and tint. Thoughtful, well-balanced construction is paramountly, if not exclusively, required, so that everything contrary to constructive use is prohibited. This does not forbid what may be comprised under the head of constructive ornamentation, such as pattern bricks, anchor heads and other things of the kind and form which are, as stated, expressly required. What is, then, here to hinder the architect from fully conforming with the maxim first established? Will good sense, fair information and perseverance not always succeed?

Second. Store buildings. With this class of buildings we must somewhat descend from our platform, unless we reckon plastering to be a constructive factor, which it evidently is not. But the exterior is as free to what I may term logical treatment, as it is with buildings of the first class. Retail store fronts, however, offer one difficulty which is rather a conundrum. The law of gravity is curtailed of its expression by the business demand, all glass! and this is supreme. The code here is then, that it is best to diminish all supports to a minimum, and let the surface be most exclusively occupied by glass, the rule being that no indication at all is in every sense better than one which expresses want.

Third. Office buildings. With these we are on a clear field, nothing prevents us from giving a truly artistic treatment as we please. Yet when we come to those extreme heights required by present demands, the difficulties become materially increased, though not insurmountable, as

buildings of this class lately erected in our city will exemplify, buildings of which we may justly be proud. It is evident that tenement buildings, hotels and the like, may here be classed under this head.

Fourth. Auditory buildings. This class comprises the foremost and highest order of buildings, and generally taxes the imagination and knowledge of the architect most severely. Our maxim here is for the present rather distant. Success thus far is substantially such that we ought to say: "Oh, Lord, have mercy on us poor sinners." We merely copy to a wide extent, the dead forms of the past.

Fifth. Residence buildings. We now come to the broadest, most numerous, and varied class. Within the past twenty years this has received a most special attention from builders and architects, and the variety of designs is practically endless, properly so as the variety of wants (and very often whims) which condition the groundplan. Our topic seems to lose with residence buildings a good deal of its seriousness. The architect feels freer, and goes to work more lustily. But is he so free? Is it right and proper that he may work wholly at random, without regard to natural scenery? Is not nature in fact a commanding feature into which a residence building must be fitted? If it is true that architecture holds a close relationship to music, it is the more true that the notes woven in the forms of architecture must be consonant with that silent music which is the ever inherent part of nature, molded even as she may be by the art of man. This principle was most firmly upheld in the seventeenth and eighteenth centuries by the architects of Great Britain. The lovely palaces by them erected, peculiarly in Palladio and Baronioni style, are surrounded by most beautiful parks. Without this park they would be more or less commonplace. But with the park they are works of the highest art, and ever draw our admiration.

Residence buildings may be classified as follows:

a. Urban residences.—Their location is on a crowded street, without any or with a diminutive gardenplace. "Urbanity" with them is demanded. Stateliness and order are their main requisites. The character of the street commands the character of the house. Yet, as the habitation of a gentleman with a determined mind, is as most necessarily, inasmuch as the case admits, at least, indicates, likewise, the character of that gentleman.

b. Suburban residences.—Their location is off from the city proper; they are surrounded by a garden or park, and their expression must be such as cannot be well separated from it. They may be very freely treated, always, however, in consonance with their environment.

c. Country residences.—Their location is essentially freed from urban regularity, and correspondency with neighboring houses is not required, not more so at least than may in a measure be demanded by the corresponding character of landscape. But the harmony between the features of the house's architecture and those of the landscape is intrinsically necessary to a work of art. Here then is the broadest field for a gifted architect, who understands sketching landscapes, and blending therewith the forms of a castle or a rich country house.

Viewed under our maxim the architecture of residence building appears somewhat loose. This is, however, not altogether necessary; the knowing architect, seriously disposed, will never fail to keep within bounds. But the less educated, the average American architect, seems lustily to strive after the most abnormal, absurd and unbefitting forms, and our city is virtually brimful of all sorts of quaint, meaningless, coarse, clumsy and in many regards absurd features.

Architects are anxious to suit employers. Dwelling houses are essentially built for the weaker sex. Women have for quite a period been educated more or less in drawing and painting and are in a measure desirous of practically impressing their thoughts upon the fronts of their houses. But has woman anywhere a mention in the history of architecture? Great as she has been in writing, in sciences, in painting, she has scarcely ventured upon sculpture, and as to architecture, she has, till very recently in our country, never stepped on the arena. Evidently the present state of our domestic architecture has beckoned to her.

How this state is regarded by a critical newspaper may readily be taken from an article in the *Chicago Times*, of May 30, 1886, of which I cite parts as follows:

No person possessed of even a very moderate quantity of architectural taste will fail to see that construction in Chicago has run mad. Taste, so called, has been on a delirious spree, and the results are that the new residences are often not unlike the dreams and fancies of the insane. For three years the crazy-quilt style has dominated in patchwork and in architecture. It has pervaded facades, and taken possession of investors. Variety, eccentricity, the bizarre, the unexpected, the startling have prevailed in every direction. Dwelling houses in quiet streets, and with pacific surroundings, have developed as huge piles of massive stone, whose motive, as indicated by their appearance, is that of security, confinement, solidity, defense. They resemble castles, jails, safe-deposits and storehouses, fire and burglar proof in their remotest details. Not only has there been this incredible massiveness and solidity developed in the use of stone for residences, but there has been a strife to secure odd effects in the color of the material. The faces of the stone present the same inexplicable craze for variety, and include everything from the Cyclopean suture to surfaces that are recessed at the joints, vermiculated, or contorted in some other form.

As to styles of facades there has prevailed a license which in many instances is simply diabolical. Variety, differentiation, the antagonistic, have all been brought into use. Anything like concentration, like synthesis, symmetry, attraction, has been rejected. All broad effects have been carefully struck out, and incessant, fatiguing, vulgar details have taken their place. In scarcely a single one of the more pretensions and expensive houses which have been erected within the last three years is there a single point within or without on which the eye can rest. They resemble the tail of a peacock, whose myriad colors and hues confuse the vision and blur the general effect.

Chicago is getting old enough to stop this nonsense in its architectural array. It is like an over-dressed miss from some country village who has abundant wealth, an ambitious desire to shine, and no taste to spend her money and carry her wishes into effect.

An article of similar strain was also published by the German *Staats-Zeitung*, relative to our last November convention, and not very flattering to American architects. After speaking of those immense, tall buildings in New York as simply indicative of the large capital therein invested, the paper speaks of the residences of Chicago, St. Paul and Minneapolis as in absurdity preëminent to those of New York, and continues thus:

For it is beyond all comprehension what is brought about in these cities in the line of architectural follies. Let us take an educated European on a slow tour through the residence part of Chicago, and show him those wonderful monkey houses and birdcages, those sham burges, those hermitages, chapels with peepboxes having variously colored

glass, built during the last year, and he will exclaim: "One of us two is crazy, either the architect who built that stuff or else myself, but of one thing I am sure, I am not the crazy one."

It is a crazy, lusty carnival which is held in the West by American architecture. The people doubtless will, after ten years, be happy to sell their misshapes for the worth of the material.

American architecture, to be worthy of such a name, should aspire for higher aims than are won by the stupid interwelding of European patterns in accordance with the taste of a Kafir, who suddenly became rich. Its task is to produce the greatest practical and real comfort and combine the same with forms of beauty. When this is won then it will be time to speak of American architecture.

This is newspaper style, exaggerated like everything thus published. Yet it doubtless contains a great deal of solid matter, as must, though ever so reluctantly, in substance, be admitted. Our architecture generally taken cannot be better than is the average of the experts who produce it. In Germany, the architect, having passed a severe examination, is (*prima facie*) a man of education and all are united in one league. In our country the merest, most ignorant dabbler has an equal privilege with the expert, but the citizen has thereby, thus far at least, not felt enough damaged to be clamorous for improvement.

But even among our better architects, this truth seems to be more or less disregarded, namely, that there can be no perfect beauty to any human production as a whole, unless there is a corresponding beauty in every part and detail of it. It is unnecessary to show how clearly this principle was understood by the ancients and by the Italians, and that medieval art, rightly understood and rightly applied makes no exception. The beauty even of a natural object, that of human form, is not perfect unless every part of the body, every limb with its silent motion, the face and its expression, is beautiful. Why, then, not follow more freely, more lustily, this path shown to us by Mother Nature herself? There is, I trust, good will and talent enough alive in the architectural profession of our country. Let to this be added a well-balanced philosophy, and this truth will therefrom evolve, that, as first alleged, the building object will become in a measure like a live organism, which establishes even its ornamentation as though sprung from a natural law.

On this path we may, and I hope we shall come in future to an art which has its own birthright. Whether it may or may not then be called a style, I am not concerned in. I merely know style—not a style—which Gottfried Semper comprises under "harmony of a building, with the conditions primary to its coming into existence."

Secretary Stiles then read the paper prepared by Mr. C. M. Palmer.

C. M. PALMER.

After considering the views Mr. Clay has expressed on the subject of "To what extent is it necessary in design to emphasize the essentially structural elements of a building?" I am inclined to think he has taken too serious a view in favor of giving the structural elements recognition; and, shocking as it may appear to some, I am inclined to believe that in our relations with art, we are not required to "tell the whole truth and nothing but the truth." Art ignores truth as positively as truth ignores art, and they have of necessity, nothing in common. Art has to do with the pleasing, the fanciful, the artificial. She delights in mimicry and fictions. She may teach that which is good and true, but her real mission is to teach that which is beautiful, and I consider it would be ungracious and quite irrelevant to place her on the witness stand and cross-question her on the subject of truth. Many of her most beautiful productions are uttered to lure the imagination into fancying the near is far; that paint is a rose leaf or a sunbeam; that the absent are present; even that the haggard cheek blooms with health; and so we could go on calling to mind countless illustrations to show that where there is the greatest art there is the greatest deception.

Then why should the architect be cut off from the privileges of artists generally, and be required to make evident the skeleton of his creation, when it is not beautiful, and cannot be made so, except at the expense of stability or of his clients' pocket. And why not resort to innocent deception, when we can, by drawing a pleasing curtain before an unpleasant scene, leave it to perform the duty for which it was designed, without giving offense.

As I was examining a fine scenic photograph, in which was represented a portion of the great Cantilever bridge, which spans the Niagara river, an eminent artist (by way of an assertion, rather than an interrogation,) remarked, "Why do engineers always make an iron bridge ugly?" If I were called upon to answer the question, I would say, "Because true, unalloyed construction is never artistic." It has that in its very essence which discards all curves, and adheres rigidly to straight lines. We may admire straight lines under certain circumstances, but it is because they convey the idea of utility, neatness, order, even grandeur; but never pure beauty, except, possibly, to a mind trained to the practical, rather than the artistic.

To further illustrate this thought I will appeal to nature. Her methods have been submitted to numberless ages, where the unfit pass away, and the fittest survive. Here we find the bones, the rocks, in short, the construction, in all her most complete works, are covered, protected and clothed by materials, colors and forms more pleasing.

It is true that nature, in her lavishness, gives us all varieties of form and line, but her outward manifestations abound in curves, probably because the straight line is capable of no variety, and is only pleasing, when on so vast a scale as to suggest grandeur. A pond may have a level surface, but it derives its beauty from being Nature's mirror, in which is repeated her charming curves and hues of scenery.

Consider the human form. It surely is no advantage from an artistic standpoint, that the skeleton should even hint at its existence, much less show itself. The joints may be of cunning workmanship, and the bones fashioned to give the maximum of strength with the minimum of material, but it is for these very reasons unsightly. Let us clothe it or bury it, even put it in our closet (provided there is not one there already), anything to get it out of sight, for we can scarcely conceive of making it sightly, without destroying to a great measure its usefulness. One would be at a loss to contrive anything more ghastly, except by taking itself as a basis, and

emphasizing its structural element. And so the artist will seek his model, where all the facts are not even hinted at. From following these lines of thought, I would contend, it is generally better architecture and fully as honest, to arrange the structural elements of our buildings in the most straightforward manner, for their particular function is strength and durability and not beauty, and then hide their very existence with more pleasing forms, materials and colors, where a purely artistic effect is required.

I wish these few remarks construed as an essence or theory, and not as a rule, for many conflicting elements arise in the practice of architecture, where no theory, be it ever so well grounded, can be always successfully carried out. And then there is Fashion, which we cannot afford to ignore lest she ignore us, and who forms a current so strong that all must follow, excepting only he who leads, until it, seemingly of its own accord, changes its course.

J. J. FLANDERS.

"To what extent is it necessary in design to emphasize the essentially structural elements of a building?" in its practical more than moral aspect, would suggest a more simple question: What are essentially structural elements in a building? and this resolves itself into varied minor interrogatories, depending upon the type of building analyzed. It is characteristic in good design to express a sense of fitness of purpose with stability, and when this is obtained by the builder, the sin of characterless detail and tawdry ornament may be mitigated.

Void above void and mass upon mass is a simple maxim, to be adhered to when possible, and its logic will not brook eccentricity or frantic efforts for novelty, which, like April condiments, are pleasant to behold, but as sawdust in the mouth.

The apparent purpose of the masses should be rendered when possible. The thrust of arches should be opposed by similar arches, and the exterior abutment should be large for its purpose. The pier which carries the corner, and the one to sustain the girder have given to them the bulk of material.

Is it necessary to indicate upon the exterior the floor timber in a building? Does not the position of the windows render legible that of the floors? While horizontal courses near the floor lines may increase delight in the design, they are not essential to discover the position of the floor timber. The windows do this, and without them modern architecture is meaningless. They are the prime factor in good design. The architect in his efforts for proper fenestration, shows his skill in modern design. To obtain great results in this art requires an ability such as was possessed by the designer of the Parthenon. In considering the moral aspect in the execution of a design, the veneer of stone and costly brick is pardonable. That it is better to clothe the coarse, rugged brick or stone with the veneer when it can be, and impair the stability, is illustrated in all architectural monuments from the morning ages to the present time, and herein is seen the refinement of politeness in design fully as much as when the cripple takes advantage of modern art in other fields, and attaches to the stump of the lost limb an artificial one. When by necessity an arched opening is placed upon the corner in such a position that the designer is unable to counteract the thrust of the arch by buttress or pinnacle, does he violate truth when he takes advantage of an iron tie rod, apparent or concealed, to render the arch stable? The designer's sense of beauty demands the arch in a position which conflicts with stability. His ingenuity renders it stable, and the artificiality is condoned by the pleasure given. The designer is pleased at the satisfactory solution of a disagreeable problem. The constructor is happy in the fact that while the piers stand, the arch will stand. The Hindoo says, "The arch never rests." We know that if we can maintain it, a curved lintel though it be, and of numerous parts, its stability is assured, and the use of iron becomes a sister coadjutor to the other materials, and assists the design in its efforts to perfection. In the use of arch construction there is one feature of frequent occurrence in many late works that calls for strenuous protest, because it conflicts with the rational and the beautiful. An arch implies that superimposed weight, as well as its own, is transmitted to the supporting abutments. But when this appearance is violated by supporting iron struts carried to the voussoirs and breaking into the harmony of the well-known characteristics of arch construction, the effect is a brutal violation of the truth and beauty of good construction and design.

Are not the structural elements in good design the emphasis of the component parts of the design? Can they be overlooked without impairing the composition? In our minor works, we are frequently obliged to lessen this emphasis by various methods, but this should be made without brutal offensiveness, and the aggressiveness should be softened with the skill the artist possesses. Let the artificiality pattern nature in an artistic manner, maintaining so much of its characteristics that it becomes not a bold, obtrusive feature, but assimilates with the design, and assists the effort as does the mosses and lichens, which clothe and beautify jagged and obtruding rocks. "Render unto Caesar the things that are Caesar's." Express the truth when you can. In your work be governed by the principles of justice and the highest good, rather than by technical expressions of facts. There are circumstances where the artificiality, the falsehood in design is excusable, and benevolence demands that we recognize this fact: no plea of truthfulness or candor can excuse rudeness or brutality, and if we err in softening the latter, let us hope the recording angel will not blot out the stain with a tear, but greet the effort by a smile, and grasp the hand of the designer fervently, and record, "Go ye to higher honors."

SUMMARY.

W. W. CLAY.

It is a happy refuge for a man who has little to remark, to feel that those who listen have already listened long, and that they wait with some impatience for their time to come. I will, then, briefly gather all I can together and, with a parting rap or so, depart.

I find in Mr. Baumann's paper many points that strengthen the position in the matter which I take myself, and although he seems to think the theories he takes the trouble to translate for us somewhat impractical for

a bread and butter winning age, he is not inclined to gainsay them, but rather adds contemporaneous testimony as further evidence.

I have a faint suspicion, however, that the gentleman who followed Mr. Baumann could not have given careful or sufficient study to his predecessor's document, or he would have scarcely poised his lance to tilt with such a champion of art as Truth is; and his adversary must have garbed herself in triple mail, with visor down, with crest concealed, and Art itself deceived him wofully, when each ignored the other. The position taken in this paper, and the next one, would tend to show that deception practiced with a good intent, still has its advocates, and while one gentleman desires to ascend to "higher honors" without a teardrop or a reprimand, the other seems to think he'd rather frolic here below, and will not for a moment take a serious view of art, preferring "*fun to joy*."

In most discussions I have met with on this subject, even those of Ruskin, the works of nature (the human form especially) are cited, and from their existence as we see them, it is argued that the architect is right when he covers the unsightly with the beautiful. The premise and conclusion meet with general approbation, but when the syllogism is compounded, and the ghastly skull and bones and vertebrae are dangled in our presence as sufficient reason to conceal the truth, it seems to be forgotten that they display a skeleton, and a skeleton alone—not a *man*.

If we carry the distinction further, we will find—it is to give existence to the man that the skeleton is built, and that the man was not completed to conceal, or even to illustrate, the skeleton. With such a view, I think there would be less difficulty in harmonizing artificial with natural truthfulness, and a stumbling block of considerable dimensions would be removed.

If then we may consider a building from an architectural point of view, as an organism in which each part, concealed or visible, is an essential element, so disposed that one may not deny another, I think we have a broad and liberal basis, susceptible of the highest and most truthful development.

While I think no one will controvert the statement made in the initial paper, that the material used, and showing as a structural element in the sense above described, should be so treated as to be a *prima facie* evidence that it is not something else, there seems to be a doubt in the minds of some as to whether the *construction* showing shall have the option of being true or false, and, alluding to the theory advanced, Mr. Flanders asked in reference to it, "Does he violate the truth when he takes advantage of a tie rod, apparent or concealed, to render the arch stable?" In the latter case, as he admits himself, there is no longer an arch, but a truss or lintel. In the former case, one clearly violates the truth, however satisfactory may be the outward sign, however flattering may be the consciousness of the intricacy by which the end is reached. The difficulty of this position is that we know not where to stop, and it is here that freedom is mistaken for license by those spirits which rebel at guidance, and in their reckless passage, carry many a reluctant seeker after truth, who shall in after years, when earnest work has freed him from the bondage which he sought not, pass those scenes of former dissipation with downcast eyes and trembling expectancy, lest his well-trained friend shall point across the road, and with irony remark: "Who the d—l perpetrated that?"

DISCUSSION.

The chair: Discussion is now in order, gentlemen.

Mr. Patton: In regard to one remark, that a concealed tie-rod may make an arch sufficiently strong and just using a pleasing form, where, without the tie-rod, it might seem weak, I would meet it by this: that such a form is not pleasing to any well-regulated mind. Only yesterday a gentleman was criticising one of the prominent buildings of this city, because the end piers against which the arches had burst were not strong enough, apparently, to sustain the thrust. He said it made a disagreeable appearance, and it was not satisfactory in its design. I should say that all questions of that nature could be settled if we will apply two rules; first, that the building must be strong; and, second, that it must *look* strong. It is not sufficient that it be strong unless it *looks* strong. Whatever we use, tie-rods, lintels or arches, or any combination, they must satisfy the eye, so that in looking at the structure there can be no question as to the stability. Individuals may differ as to the actual interpretation of this, but the general impression must be with strength, that when we see the thrust or the weight there must be something to resist it. It is a familiar principle, that if we have any heavy weight to sustain we should show a suitable foundation to sustain it. There is, it seems to me, a reverse principle to that, and which is often ignored: we should never make a great foundation unless we intend to put something on top of it. A good deal has been said on the subject of arches, and there is one question that comes to my mind: every kind of building is good if used in the proper place, and if used in accordance with its nature; but any kind of building material may be put in and used contrary to its nature. Now it seems to me that a curved semicircular form, for instance, used in the façade of a building is not, of necessity, of an arch. Why can we not use the semicircular form without the arch? Now we see at the present time voussoirs in which are curved forms made of wood and covered with shingles. I am not prepared to state that these are deceits, but when the architect makes a semblance of a keystone out of shingles, or a keystone out of copper, and puts it into the center, it seems to me it is a violation of good taste. I think such forms may be used, providing we will recognize the fact that it is the surface covering used protecting the real materials beneath, and treating it as such, and not treat it as a constructive feature, and if we keep these principles in view, it seems to me we can use a great many curved forms where they are useful, and yet not violate any principles of good taste.

Mr. Pierce: I think we are sometimes hampered in our free use of forms from the function that a particular form in the history of architecture has had to favor. For example: We regard the column as necessary to sustain weight from above. In the same manner we regard the curved form as an arch, and when we see that curved form we look for something to take the thrust of the supposed arch. Even in the case of columns our preconceived opinion, based upon what we see in historic forms, that it is

intended to sustain weight from above, does not necessarily alter the case. It may be put there to act as a sort of buttress for stiffening the wall. Take the buttress itself; it was employed originally to take the thrust of roofs that had no beams across; and yet we see it employed now illegitimately where there is no thrust, and we call for the buttress as a buttress. Now, to what extent we should discard a feature simply because it does not fill the function that it was originally intended to fill is a broad question. Speaking individually or for myself, I should say that if I see an arch, I am not satisfied with the knowledge that there may be somewhere concealed the strength that carries it; I look for a sufficient abutment to take the thrust away, and if I do not see it I am disappointed. Still, an artist may see the beauty in that form of an arch and ignore the function of the arch. There was one point in Mr. Flanders' paper in which I think he voices the general sentiment to some extent on the subject, as I think he does mine. That is, that where there is an arch there should be no appearance of support to any part of it.

Mr. Clay: It seems to me, if I understand Mr. Flanders aright, that there is great impropriety in putting supports under the voussoirs of an arch.

After some further informal discussion, the meeting adjourned.

Association Notes.

WESTERN ASSOCIATION OF ARCHITECTS.—Convention will be held November 16, 1887, at Cincinnati. J. F. Alexander, La Fayette, Ind., secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the first Saturday of every month, at 15 East Washington street, Chicago. Annual meeting first Thursday in October, 1887. Clarence L. Stiles, Chicago, secretary.

INDIANA STATE ASSOCIATION OF ARCHITECTS meets on the fourth Wednesdays of January, April, July and October of each year. Annual meeting fourth Wednesday in October. E. H. Ketcham, Indianapolis, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at Kansas City on the second Tuesday in January, 1888. Charles E. Illsley, St. Louis, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of August, 1887, at Spirit Lake. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 3, 1888. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Wichita on the third Tuesday of January, 1888. J. C. Holland, Topeka, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1887. F. B. Hamilton, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets semi-annually. Next meeting third Thursday in July, 1888, at Cleveland. F. A. Coburn, Cleveland, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets bi-monthly. Annual meeting third Thursday in February, 1888, at Memphis. T. L. Dismukes, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Houston on the third Tuesday of January, 1888. S. A. J. Preston, Austin, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October each year. F. M. Ellis, Omaha, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday, Builders' and Traders' Exchange. W. G. Williamson, secretary.

THE WESTERN SOCIETY OF ENGINEERS meets the first and third Tuesdays of each month at 4 o'clock, P. M., at 15 East Washington street, Chicago.

EDINBURGH ARCHITECTURAL ASSOCIATION.

The members of the Edinburgh Architectural Association visited Duleton Castle, on Saturday afternoon, under the guidance of Mr. David MacGibbon. The conductor first drew attention to the exterior of the castle, and pointed out the advantages of the site for defense, the walls being built on a rock, which, although not lofty, was too hard to be undermined, and this whole being surrounded with a wet ditch. This was crossed by a long wooden gangway, the stone pieces to support which still exist, and part of which formed the drawbridge. The oldest parts of the buildings date from the thirteenth century, and formed a portion of the castle which was besieged and destroyed by Bishop A. Beck, in 1298. These consist of three large towers at the southwest angle, and a part of a tower at the southeast angle, all the details of which belong to that period. The castle was rebuilt, to judge from its style, in the fifteenth century. The entrance gateway, with the portcullis room above, the hall and other buildings on the east side are all parts of this restoration. The hall has been a splendid apartment, 72 by 25, with screen and minstrel gallery at the south end, and the dais and lords' apartments at the north end. The kitchen is on the same level, and has a very lofty vault with aperture for ventilation. It is provided with two large fireplaces and a good service room; below this are the bake house and wine cellars. Under the lord's private room are

guard room and dungeon. In the sixteenth century a private dining room and other apartments were erected at the southwest angle of the courtyard—dining in hall being then given up. The gateway in the outer inclosing wall and the dove cote were pointed out as deserving of notice. Duleton belonged in the thirteenth century to the De Vaux family, whose heirs brought it to Sir John Haliburton. His grandson, created Lord Haliburton, in 1440, was Lord Treasurer for Scotland, and the castle was probably restored by him. In 1603 the property was conferred by James VI on Sir T. Cropine, who saved the king in the Gowrie conspiracy. It afterward passed into the hands of Sir James Maxwell, and in 1663 was purchased by Sir John Nioliret, who as Lord Advocate bears the title of Lord Duleton. The castle still remains in the possession of his descendant, Lady Mary Nisbet Hamilton, to whose taste and liberality the public are indebted for the careful preservation of the buildings and ready access to the beautiful gardens which surround them. At the close of a very enjoyable day a hearty vote of thanks was accorded Mr. MacGibbon for his interesting paper.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS.

Architect Thomas Sully, of New Orleans, member of the Western Association committee on State Organization, called a meeting April 28 to consider the formation of a state association of architects. There were present at this conference Architects Thomas Sully, Maj. B. M. Harrod, Deitel & Son, Patton and Williams, William Fitzner, A. Toledano and J. F. Braun. James Freret of New Orleans, sent a letter indorsing the movement. Mr. Sully was chairman of the meeting, and a committee, consisting of Architects Harrod, Fitzner and Sully, was appointed to draft a constitution and by-laws to be presented to a full meeting of the State architects, to be called by Mr. Sully. Mr. Sully's address is 31 Camp street, New Orleans.

KANSAS CITY ARCHITECTURAL SKETCH CLUB.

This club has been permanently organized, with sixteen charter members. John Van Brunt is president; A. H. Ramsden, vice-president; Willis J. Polk, secretary; W. M. Kenyon, treasurer. These officers and L. S. Curtis form the Executive Committee. About fifteen architects were present at the inaugural meeting, and the club is heartily indorsed by the Kansas City Society of Architects. The club has already had one competition for a "Clock Tower" in which ten designs were submitted. Awards were made to Willis J. Polk, John H. Roberts and L. S. Curtis, as first, second, and third choice. Architect Henry Van Brunt made the awards. Another competition was closed April 25, for a small country house; the awards are not yet announced. Announcements for further competitions will be deferred until the Executive Committee decide upon the best course to pursue, having under advisement a suggestion by Mr. Van Brunt in regard to taking up the orders in the monthly competitions, claiming that those thoroughly informed in that direction could design in the conventional styles with greater regard for proportion.

The club will be glad to receive suggestions regarding the advisability of Mr. Van Brunt's suggestion.

THE BOSTON MASTER BUILDERS' ASSOCIATION.

In order to avoid any disturbance to progress of building by strikes the Master Builders' Association entered into correspondence with the representatives of the journeymen in the different trades, which recently brought about a meeting between a committee from the association and representatives of the building trades. In the conference the committee sought to decide upon the best course to pursue, avoiding all discussion of prices, believing that the price depends upon the man. That of "union" or non-union men was ruled out for the reasons stated in the declaration of principles of the National Association of Builders, which establishes this as a fundamental principle, that must remain "unquestioned and unassailed." The basis of settlement was as follows, and while the committee were not authorized to do anything but confer and report, their several associations accepted and adopted the result of the conference unanimously.

BOSTON, April 11, 1887.

We the undersigned, having met in conference to consider the questions of a uniform number of hours of labor for workmen in the building trades, and a mode of adjusting future differences that may occur, do hereby recommend to the various associations which we represent that it will be wise for all trades concerned in the erection and construction of buildings to require but nine hours' labor in the limits of a day for the first five working days of the week, and eight hours on Saturday under payment by the hour from April 1, 1887, until April 1, 1888.

We also recommend the method of arbitration arranged for in article No. 5 of the code of working principles adopted by the Master Builders' Association as wise and fair for all concerned.

We also recommend that a conference be held not later than the middle of January in each year to consider such questions as may be properly brought before it.

For the Building Trades Council, For the Master Builders.

L. W. DAVIDSON,
A. M. DALLAS,
J. HARRINGTON,
D. J. HENRY,
J. W. COMSTOCK,
J. E. JACKSON,
MICHAEL SULLIVAN.

L. P. SOULE,
CYRUS T. CLARK,
IRA G. HERSEY,
HENRY HUSSEY,
ELISHA LITTLEFIELD,
DAVID MCINTOSH,
W. H. SAYWARD.

Article 5 of the code of working principles referred to in the resolutions is as follows:

It shall be, as it always has been, the recognized right of the group of workmen in the employ of any individual contractor in the building trades to demand and receive from their employer a hearing upon any grievances that may arise, or any changes that may be desired; and at this hearing they can elect to be heard through a spokesman chosen from their number, or by their individual voices; but no person outside the employment of said contractor will be allowed to represent them. If amicable ground of settlement is not reached through such hearing then the grievances shall be left to arbitration (should the terms of such arbitration be mutually agreed upon by the employer and his workmen), in the same manner that other business disputes and complications may be settled.

It will be seen by the resolution that the most important points agreed to are the number of hours for a day's work, nine instead of ten, as at present, and the payment of workmen by the hour instead of by the day.

The question of shorter hours on Saturday is also settled satisfactorily, and it is believed that other matters not touched upon in the conference will adjust themselves on the basis thus established.

The entire conference was most harmonious, and will have a strong effect upon the future relations between employers and employes throughout the country, its action outlining a policy that should be considered and acted upon in the present crisis in Chicago.

ASSOCIATION OF MASTER CARPENTERS OF CHICAGO.

At the last regular meeting of the association, on April 14, the following declaration of principles was presented by its Executive Committee. The report was formulated and presented by the acting secretary for the Executive Committee, R. C. McLean, and after a general discussion, was unanimously adopted. It reads as follows:

To the Association of Master Carpenters of Chicago:

MR. CHAIRMAN AND GENTLEMEN,—Deeming it proper that you should have a full report of those matters which have occupied our attention for the past few days, and that we should not only report to you the results, as far as reached, but to some extent, explain to you our reasons for our course of procedure, we present to you the following:

The facts are that a week ago last Monday the journeymen carpenters throughout the city struck work without notice to employers. A mass meeting of contracting carpenters was held on Wednesday, and a called meeting of this association was held Saturday night last. By mistake, and through no fault of this association, the impression got abroad that this was also a mass meeting, and many who were not members came, and not being admitted, went away dissatisfied and feeling that in some way they had been ill-treated. At that meeting a notice was received purporting to come from the Executive Council of the Carpenters' union, making certain demands. This writing had neither letterpress or seal to distinguish it, and was, as you know, simply signed "The Executive Committee." It was brought by three parties, who said they were members of the Executive Council of the union. We sent one of this Executive Committee to the Executive Council of the union to ask for a written statement of their demands or grievances, over their signatures, and also to ask them for a copy of their constitution and by-laws, that we might have something to work from in our endeavor to settle the strike in the interest of the journeymen and of ourselves. They refused to make any further statement, and said they had no seal, would give no other signature, and would not give a copy of their constitution and by-laws. After thus trying by all fair means to get the demands of the striking carpenters in writing from their Executive Council, and being unable to do so, we concluded they had no real representatives, and any demands we would get from them would be prompted by malice rather than fairness.

The advisability of advertising throughout the country for men was fully considered by your Executive Committee, and it was decided not to do so at present; mainly in the interest of humanity, considering it unjust to the journeymen living at a distance to bring them here when they might have work but a few days; as it has become more apparent day by day that the men in Chicago will all go back to work when they feel they can do so with safety.

We have been careful that you, and the public as well, should be kept fully informed of the situation through the daily press, and it is due the papers of Chicago to say that they have been uniformly fair, and have sought to give the facts as clearly as possible, without exaggerated or sensational features.

We have, in considering the present crisis, and the speedy settlement of present difficulties, gone farther, and tried, as far as possible, to lay such plans as would make any settlement that might be arrived at permanent and lasting. We would urge upon you the wisdom and necessity of this. We believe that mistakes have been made by this association in that we have allowed ourselves to take action that has been construed to mean that we deny the journeymen the right to organize. This is a right that lies as a fundamental principle of American liberty, and belongs to all men and classes of men. What we have meant is that we deny the right of any man, or class of men, to seek to abridge or govern the freedom of action in another, and this principle we can neither violate ourselves nor allow others to take from us.

We must, therefore, settle this difficulty upon the broad principle of right, both for our own interests and for those of the journeymen. Our interests and theirs are not antagonistic, but are mutual. We are all workmen together, and we can never disagree without doing equal injury to both.

These are, as we have said, some of the results that have come from four days of the closest study of the situation, its present aspect and future needs. We have thought that before we went any further, in order to prevent mistakes, and that we might have a line to follow that would be plain, the right of which would be incontrovertible, we propose to you the following resolutions, hoping that after careful deliberation that you will accept them as a declaration of the principles of this organization, and from which, in all our actions here or in future dealing with the journeymen carpenters, there can be no deviation. Holding, as we do, that these resolutions sustain and protect the rights of our workmen as well as of ourselves, and that their passage and recognition will give to the journeyman a greater freedom than they have yet enjoyed, and will enable them to see exactly how we stand, they will also give to the public the assurance (which, at this critical moment, is extremely necessary) that we are level-headed business men, and not hotheaded cranks. The resolutions are as follows, and we ask your earnest attention to each section.

As we think the journeymen reasonable men, willing to repair a wrong committed, and acknowledge undoubted rights, be it

Resolved, That the Master Carpenters will, as a preliminary to any negotiations with the Carpenters now on strike, require that the men now on strike without notice to their employers, agree to resume work at the following scale of wages, to be agreed to by employers and employes, viz:

Eight hours to constitute a day's labor at 30 cents per hour and upward, according to the skill or efficiency of employes.

Resolved, further, That the Master Carpenters lay down the following rules as a declaration of principles, as the unquestionable rights of employers and employes, upon which there can be no arbitration or question. These rights to be conceded by both parties before any further action is taken looking toward a final settlement of differences for the future.

RULE 1. The right of the employer to employ and discharge employes whether belonging to Carpenters' Unions or not.

RULE 2. The right of the employe to work or not to work with non-union men.

RULE 3. The right of the employer to hire unskilled labor that will suit his purpose at any price at which he can get it.

RULE 4. The right of the employe to get the wages he demands or not work.

RULE 5. The right of individuals to associate for all honorable purposes.

These rules lie at the foundation of all liberty of action, and must be recognized before any prudent business man will invest capital in any enterprise requiring the employment of labor.

Respectfully,

W. H. WOODARD,
JONATHAN CLARK,
JOHN RAMCKE,
SAM'L H. DEMPSEY,
FRANCOIS BLAIR,

Executive Committee, Association of Master Carpenters of Chicago.

COLUMBUS BUILDERS' EXCHANGE.

The regular attendance of this exchange is from forty to fifty members, and its growth has been rapid, it now containing a membership of about sixty, composed of the best contracting firms in the city.

Since the convention of National Builders, at Chicago, the different measures inaugurated there have been reported to the association by Delegate George B. Parmele.

At the last meeting a vote of thanks was tendered past-President Slade and George B. Parmele for efficient service, and a motion that R. C. McLean, of THE INLAND ARCHITECT, be made an honorary member, was referred to the Board of Directors.

New Publications.

PUMP CATECHISM. A practical help to runners, owners, and makers of pumps of any kind. ROBT. E. GRIMSHAW, M. E. Practical Publishing Co., 3 Dey street, N. Y. Price \$1.00.

This book fills a niche in mechanical literature which hitherto has been vacant. Those who are familiar with the author's catechism of the steam engine, boiler catechism, etc., will understand the purpose and character of this latest educational effort of Mr. Grimshaw. It is only necessary to say the treatise covers the theory and practice, designing, constructing, erecting, connecting and adjusting pumps of every kind. The matter embraces in the neighborhood of 250 pages, sufficiently illustrated to emphasize the subject so that "he who runs may read."

THE PREVENTION OF FIRE. WILLIAM PAUL GERHARD, No. 30 Union Square, N. Y. Price 60 cents.

This is a small yet very lucid treatise on the construction of buildings, with reference to protection against fire. The contents of the work as indexed, shows the mechanism of the treatise, namely: Defective and unsafe building; sound building; fireproof construction; slow-burning construction; roof construction; defective chimney flues; elevators and staircases; means of escape; fire escapes; heating apparatus; laundry and drying apparatus; artificial lighting; protection against lightning; fire-alarm apparatus; watchmen; supply of water for fire extinguishing apparatus; fire rolls and fire brigades. Each of these subjects are treated under separate chapters, and in a clear and concise manner, and indicate at every step an intelligent understanding of the matters discussed. It is a book that should be in the hands of everybody, particularly those who are likely to become builders, or have the charge of public edifices, such as asylums, prisons, and charitable institutions. The work may be had by addressing the author as above.

MODERN ARCHITECTURAL PRACTICE. No. 1. A Large Country House. BRUCE PRICE, Architect. New York: William T. Comstock, 6 Astor Place; \$5 post paid to any part of the world.

The stream of tendency is intercepted by sundry eddies and counter currents. One result of cheap printing is that in this age of specialists, and division of labor, the market is flooded with books that offer to make "every man his own lawyer," or "every man his own doctor." Along with these come books that proffer to the would-be specialist a short and easy road to the knowledge he must somehow acquire. Teaching is expensive; experience comes slowly; and "French without a master" finds a ready market. The architectural profession has not escaped the infliction, and a deluge of books profess to tell the farmer or the man of business how to build a home—plans, specifications and superintendence—all between the covers of one small 8vo. After a dreary superfluity of architectural works of this class it is a pleasure to find on our table a work which abundantly fulfills what it modestly promises, which really gives something and does not offer everything. Such a book is Mr. Bruce Price's, "A Large Country House." The problem which the author has set himself is to design a country house which shall meet the requirements of the life of a well-to-do American of today. How well he has solved his problem will be seen by an inspection of his work. In his short and suggestive preface, the author notes the conditions in life and purpose, in climate and materials, which should predetermine the characteristics of such an American home. He points out that the type which is being thus evolved conforms to none of the recognized European styles. Perhaps in expanding this thought he has gone too far, when he ventures the assertion that "we are * * * dropping the word style from our practice." There is no reason why a building which conforms to none of the established styles should not belong to yet another and different style. Admit that the opening has been spanned in all ways from the flat stone to the Gothic arch; that we have seen the scale from the Gothic roof to a wall which finishes with a coping; that this feature suggests Dutch, this other Romanesque. Still the building of the future may be as easily separated from all other sorts as was the Gothic church from the classic temple, may be as distinctive in type. We need not misuse the word, nor pretend that a given building is of a style when it is not; nor is it worth while to discard a word which we shall yet need to describe that house of the future which the author himself could only hint at by the use of this same word, when he spoke of the "opportunity to raise the structure of an American style."

In the book we find a concise but complete specification, accompanied by perspective views, elevations, plans, sections, and full details, in accordance with which the author erected a country house at San Mateo, Cal. We note a few errors which have escaped the proofreader—"comes" for come in the third paragraph of the preface; the upper figure of the fraction dropped on page 8, under the heading "Stirrups"; the use of "5-inch lines of waste pipe" for "five lines of waste pipe" in the plumbing specification. In general the make-up of the book is deserving of high praise.

MONOGRAPHS OF AMERICAN ARCHITECTURE. Boston: Ticknor & Co. For sale by A. C. McClurg, Chicago.

Very different in character from the above is the series of monographs now being issued by Ticknor & Co., of Boston. The Comstock series presents in each number in reduced scale complete specifications and drawings for the erection in workmanlike manner of a first-class building. While the building presented in the first number is from the studio of Mr. Bruce Price, and in point of style and merit up to his high standard, yet its publication in such form is addressed rather to the practical than to the artistic side of the architect's work. It will give the young architect a hint of the essentials of high-class work, and incidentally may lend him inspiration in other matters than specifications and sections. The Ticknor series, on the other hand, is addressed solely to the artistic side. Each number presents exterior and interior views, with an occasional plan of one or more representative buildings, by representative American architects. In so far as it is addressed to the architectural profession its value depends on the architect. The architect who is abreast of the day has seen these

buildings, or has gained his inspiration from the sources which inspired their designers; is ready by study to do good work; and realizes that photographs and gelatine prints cannot make an artist of any man. To such an one the series falls, not into the working library, but into the list of books immortalized by Charles Lamb in his essay on the books which no gentleman's library should be without. To the architect who has not seen and studied what the old and new worlds have to offer, or who is not sure of his own artistic sense, these monographs offer a source of inspiration of a more immediate nature, and may most appropriately come in as a part of his working library.

But this series is addressed to a wider class than the profession, and in this wider reach, we apprehend, will be found its highest value. We refer to the influence that such a series may exert in bringing the best work to the notice of the public generally, and thus educating popular taste in a much needed direction. Not to overlook the bad taste daily displayed in matters of literature and music, in painting and decoration, we incline to the belief that in no other direction are the American people guilty of such general widespread sad taste as in judgments upon architectural works. We accordingly welcome every means which, by familiarizing the public with the better, may lead them to condemn the worse.

The monographs thus far published are:

No. I. Harvard Law School, H. H. Richardson.

No. II. The State Capitol, Hartford, Conn., Richard M. Upjohn.

No. III. The Ames Memorial Buildings, North Easton, Mass.: 1. Town Hall; 2. Library; 3. Gate Lodge; 4. Railway station. H. H. Richardson.

No. IV. The Memorial Hall at Harvard. H. H. Richardson.

The buildings and their designers are well known to our readers, and need no comment from us. The Ames group at North Easton will doubtless stand as the most distinctive and characteristic of the late Mr. Richardson's creations, and as such give a special interest to No. III of the series.

The monographs are put up in portfolio form, the gelatine plates are finely executed, and the fact that their publication is in connection with the *American Architect* is ample guarantee of the excellence of the workmanship.

Our Illustrations.

Railway station at Manitou, Colorado; Clinton J. Warren, architect, Chicago.

Residence for D. K. Hill, Michigan avenue, Chicago; Burnham & Root, architects. Reproduced from pencil drawing by Lautrup.

Block of four houses, for W. S. Walker, on Ellis avenue, near Thirty-seventh street, Chicago; Patton & Fisher, architects. Materials: Brownstone, pressed brick and terra-cotta; red slate. Two stories and attic, each 19 feet frontage. Cost \$5,000 each.

Block of three dwellings on Laflin street, Chicago, for Jas. D. Marshall; Alfred Smith, architect. Frontage, 53 feet; depth, 64 feet; front work, rock-faced blue Bedford stone throughout, with copper roof dressing; red slate roof; interior of Georgia pine throughout; furnaces; wood mantels, etc. Cost, \$22,000.

"The Midway" Hotel, Kearney, Nebraska, S. E. Des Jardins, architect, Cincinnati, Ohio. The building contains besides the hotel, eight stores and a bank, with safety deposit room in the basement. The hotel is complete in all its appointments, and has sixty-five bedrooms. The dining-room and kitchen are on the second floor. The first story is of Colorado red sandstone. The second is of St. Louis pressed brick, and above the second story the building is principally of wood with heavy timber work and covered with shingles. The cost will be about \$50,000. The building was commenced October, 1886, and will be complete the coming fall. Kearney is one of the active towns of the new West, and is said to be half way between New York and San Francisco, hence the name "The Midway."

The Lakeside Club building, to be erected on the west side of Indiana avenue, between Thirty-first and Thirty-second streets, Chicago, L. B. Dixon, architect, will cover the entire lot, 50 feet front by 160 feet deep. The front part of building will be two stories, basement and mansard roof; the front of St. Louis pressed brick, with brownstone and terra-cotta trimmings, and rock face stone basement. The basement will contain a dining room, kitchen and laundry, billiard room, bar and heating apparatus. The parlor floor will contain the library, parlor and ladies' and gentlemen's reception rooms and toilet cloak rooms. The second story will be devoted to card and committee rooms, and the third story to servants' rooms and storage. In the rear part of the building is a large hall, 44 by 75 feet exclusive of the stage, which is 14 by 25 feet. The roof of the hall will be open trussed and tracery work, and will be neatly decorated. The hall is reached by a broad hallway, 50 feet long, leading directly from the front door. Under the large hall is the main dining room, with a seating capacity of 300; also, a bowling alley, 88 feet long, in connection with the bar and billiard room. The building will cost about \$25,000.

PHOTOGRAPHURE PLATES.

(Issued only to subscribers for the Photographure edition.)

Residences at Cincinnati; S. E. Des Jardins, architect.

Residence for E. A. Burdett, Bellevue place, Chicago; Burnham & Root, architects.

Residence for Robert Strahorn, Kenwood, Ill.; Burnham & Root, architects, Chicago.

Residence for W. F. Keep, No. 387 Dearborn avenue, Chicago; Henry Ives Cobb and Charles S. Frost, architects.

Residence for R. R. Cable, corner Cass and Erie streets, Chicago; Henry Ives Cobb and Charles S. Frost, architects.

The Chicago Auditorium building, by Architects Adler & Sullivan, illustrated in the photographure edition of last month, will front 187 feet on

Michigan avenue, 361 feet on Congress street, and 161 feet on Wabash avenue. It will be 144 feet, ten stories high. The tower will be 40 feet 4 inches by 70 feet 10 inches, and 225 feet high. The Michigan avenue side and the Congress street side to the tower will be used for hotel purposes, and the tower and Wabash avenue side for offices. The auditorium will occupy the center of the block, with entrance from the Congress street side below the tower. The seating capacity will be about five thousand, and the cost of the entire improvement, exclusive of the ground, will be about \$1,500,000. The contracts not having been let, this is the only information that can be accurately given at this date, but further notes and illustrations will be published as the architects' work progresses.

Mosaics.

THE Tiffany Glass Company is located in the Pullman building.

ARCHITECT J. Speyer, Chicago, has moved to 417 Dearborn street.

THE Hay & Prentice Company, Chicago, have moved to 127 Clinton street.

JENKINS BROS. have opened a branch store at 54 Dearborn street, Chicago, for the sale of their superior valves, packing, etc.

THE mayor of Chicago has appointed Architect Willoughby J. Edbrooke, of Edbrooke & Burnham, superintendent of buildings.

ARCHITECTS J. M. Van Osdel & Co., Chicago, have moved to Exchange building, corner Van Buren street and Pacific avenue.

THE Garry Iron Roofing Co., Cleveland, Ohio, have been obliged to enlarge their works to meet the increasing demands of their business.

THE offices of the *Sanitary News*, Chicago, have been removed to handsome quarters in the Exchange building, corner Van Buren street and Pacific avenue.

THE contract for the fine interior work of N. B. Ream's residence, largely Cuban mahogany, has been let to the Carsley & East Manufacturing Company, of this city.

A special meeting of the Chicago Builders and Traders Exchange is called for Saturday, May 14, at ten o'clock A.M., to consider a general lockout in the building trades.

THE Endolithic Marble Company, Chicago, offices (J. H. McHarg, manager) have been removed to the Commerce building, where a splendid display of endolithic marble is being prepared for exhibition.

ARCHITECTS Adler & Sullivan have designed, for Wirt Dexter, on Wabash avenue, south of Harrison street, a store and manufacturing building, cast-iron front, six stories high, 70 by 165 feet. The front will admit about seventy-six per cent of light.

REPORTS from Lincoln, Nebraska, show that there is a scarcity of brick and cutstone yards. Good stone contractors and a stone yard would do well, and there is also a splendid opportunity for a brick manufacturer. A similar report comes from Salina, Kansas.

AN English exchange says that the telephone wires in Germany are generally made of steel, being considered more durable when of this material. This supposition was fully confirmed after the recent memorable snowstorm, as steel wires were found to have scarcely suffered any injury.

HANDY, CADY & ELZNER is the name of a new firm located in the Insurance Exchange building, Chicago. J. K. Cady has been for several years foreman in the office of Burnham & Root, the other gentlemen coming from Cincinnati. They have also opened an office in Minneapolis.

THE old firm of Haskell & Wood, of Topeka, Kansas, has dissolved after an existence of fifteen years, L. M. Wood, A. J. G. Haskell, each continuing business alone. Mr. Wood is a good man to send catalogues to. He will not consider them dry reading, as he is a good patron of architectural journals.

THE Chicago Anderson Pressed Brick Company have removed to elegantly appointed offices in the Calumet building. The New England Anderson and New York Anderson Pressed Brick Companies will also be represented in this office. The company will show samples of about fifty shades of special bricks in the near future. An elaborate catalogue is also in preparation.

THE first week in May will find the favorably known Boynton Furnace Co. in their new quarters at 49 Dearborn street. The continual increase of business has necessitated the removal from their old quarters on Lake street. The new premises are well adapted to the furnace business, and under the able management of Mr. J. H. Manny, the manager of the Chicago branch, the large patronage enjoyed by this company is sure to increase.

To facilitate the prompt filling of orders for their stamped and guaranteed roofing plates, Messrs. Merchant & Co. have established the following agencies and depots of supply: Sidney, Sheppard & Co., Buffalo, N. Y.; John Dunlap & Co., Pittsburgh, Pa.; F. H. Lawson & Co., Cincinnati, Ohio; Rathbone, Sard & Co., Detroit, Mich.; Goldsmith & Loewenberg, Portland, Oregon; Williams & Ingle, San Diego, Cal.; Geo. H. Tay & Co., San Francisco, Cal.

CONTRACTS are being let for the Lafayette apartment building, W. W. Clay, architect. These will occupy a block bounded by Clark, Dearborn, Oak streets and Lafayette place. The east and west fronts are 212 feet, and the north and south fronts 318 feet. The structure will be six stories high. The recent disturbance in building caused an advance of about \$20,000 in the figures for carpentering above. The cost of the structure will approximate \$750,000.

FIRST-CLASS draftsmen, wanting good situations with architects of high standing, write and send references to John C. Barnwell, architect, Rome, Ga.; Sidney Smith, architect, Omaha, Neb.; F. D. Hyde, architect, Dubuque, Iowa; J. S. Skidmore, architect, Fort Smith, Ark.; James Tyler, architect, Lincoln, Neb.; E. J. Eckel, architect, St. Joseph, Mo.;

John Sutcliffe, architect, Birmingham, Ala.; Fay & Eichberg, architects, Savannah, Ga.; William Gray, architect, Lincoln, Neb.; I. Hodgson & Son, architects, Omaha, Neb., and THE INLAND ARCHITECT, 19 Tribune building, Chicago.

IRVING K. POND and Allen B. Pond have opened an architectural office in the Pullman building, Chicago. Mr. Irving K. Pond needs no introduction to the readers of this journal as his literary and artistic contributions have long been a valuable feature in its pages. Mr. Allen B. Pond has had valuable experience as a civil engineer and architect. To wish these gentlemen success is only to predict what will not fail to come as a result of their architectural knowledge and earnest work.

It is very important to remember that sheet iron roofing, to be effective and durable, must be a superior and uniform quality of iron, with some simple and strong mode of fastening. Such improvements have been made in the manufacture and annealing of sheet iron that with proper care it can be made almost perfect in quality. A peculiar mode of fastening made and used by the Porter Iron Roofing Co. possesses to an eminent degree simplicity, strength, and durability, providing for expansion and contraction will always remain firm and secure in any climate.

Synopsis of Building News.

Abilene, Kan.—Architect Geo. W. Shaffer reports: For Dr. E. E. Hazlett, two-story frame dwelling, 31 by 53 feet, mantels, steam heat, plumbing, stained glass; cost \$4,500; under way; Paul & Jacobs, builders. For L. A. Reed, two-story frame dwelling, 39 by 58 feet, grates and mantels, steam heat, plumbing, stained glass; cost \$8,000; under way; Paul & Jacobs, builders.

Angola, Ind.—Architects Wing & Mahurin, of Fort Wayne, report: For L. M. Sniff, President Normal College, three-story and basement school and society building, 58 by 87 feet, slate roof and tower; cost \$15,000; taking figures.

Argenta, Ark.—Architect F. J. H. Rickon, of Little Rock, reports: For L. W. Cherry, two-story brick veneer stores; cost \$4,000.

Ashland, Wis.—Architects H. C. Koch & Co., of Milwaukee, report: For M. L. S. & W. R. R., repair shops, 68 by 168 feet; cost \$12,000; contracts not let.

Aurora, Neb.—Architect Wm. Gray, of Lincoln, reports: For J. F. Houseman, two-story frame dwelling, 34 by 52 feet; cost \$4,000.

Birmingham, Ala.—Outlook very good.

Architects W. S. Smith & Co. report: For Wheelan & Collins, four-story and cellar block, 40 by 100 feet; brick, stone and terra-cotta; cost \$18,000; under way; L. Scully & Co., builders. For R. H. Hagood, three-story frame dwelling; cost \$12,000; under way; Campbell Bros., builders. For I. R. Hochstadter, two-story double tenement house; cost \$6,000; under way; Campbell Bros., builders. For C. McAdory, three-story brick building, 40 by 100 feet; cost \$8,000; under way. For H. R. Johnston, two-story frame dwelling; cost \$5,000; finished. Besides numerous other buildings costing less than \$5,000 each.

Brocton, N. Y.—Architects M. E. Beebe & Son, of Buffalo, report: For Dean & Hall, brick bank building; cost \$10,000.

Buffalo, N. Y.—Architects M. E. Beebe & Son report: For J. S. Grimm, brick block; cost \$32,000. For Roth & Peffer, brick block; cost \$17,000. For David Tucker, brick block, iron front; cost \$37,000. For J. Roff, brick block; cost \$20,000. For Zink & Hatch, brick block; cost \$45,000. For different parties, brick and frame houses aggregating \$15,000. Also making plans for a brick block for Miller, Greiner & Co. to cost \$80,000.

Architect W. W. Carlin reports: For E. Levi, three-tier opera house, 81 by 120 feet, on Pearl, Mohawk and Genessee streets. First story red Medina stone; above, brick and terra-cotta, red slate roof, galvanized iron cornices, skylights, iron channels, beams, etc.; fireproof construction, steam heat, hardwood finish and tiling, closets, electric bells, speaking tubes, electric lights; seating capacity about 2,000; cost about \$100,000.

Chicago.—To review the condition of the building interests since last reports would be to review one determined strike, and the precipitation of another, with the incidental unsettling of all plans for future investment by owners, and the temporary or permanent shelving of many plans by architects. The carpenters' strike was ended by the firm stand taken by the master carpenters and the dissatisfaction of the men with the Union leaders, together with the steady increase of non-union men from outside the city. There is some trouble talked of, but the Master Carpenters' Association will take no notice of the Union or its demands, being able to satisfy their men that they are disposed to pay the highest wages possible, and to treat them as men, with absolute fairness, with wages according to their skill.

The Hodcarriers' Union made a demand for an advance of pay to 25 cents per hour for eight hours' work, but the master masons refused to pay more than 22½ cents. It was thought the strike which followed would be short-lived, as the Bricklayers' Union did not appear to be in sympathy with the Laborers' Union. There has, meanwhile, been formed an amalgamated trades' council, composed of several unions, and this council appointed a committee to wait upon the Master Masons' Association to confer regarding a settlement. Meanwhile, the bricklayers made a demand that they should be paid on Saturday, every other week, instead of every Tuesday, which is now and has been the general pay day for the past twenty years. These two questions occupied the attention of a full meeting of the master masons, on the 10th instant. The matter of change of payday was discussed. A letter was sent to the union headquarters showing that it was not possible to grant the change.

An answer came back, reiterating the demand, with the slight concession of allowing two days to prepare pay rolls. A resolution was then unanimously adopted, refusing to comply with the demands of the bricklayers, and fixing Monday or Tuesday of every other week and agreeing to shut down all work should they strike on account of this action. The Executive Committee of the Master Masons' Association reported that they had met a committee of three, claiming to represent the amalgamated trades council, with power to act. After a lengthy discussion they insisted on a minimum wage for hodcarriers of 23½ cents per hour, time and one-half for overtime and double for Sunday work, and, lastly, the recognition of their union.

The former, said the committee, was debatable and might have been granted, and if the latter had been understood to mean their right to organize, this also, but they maintained that recognition meant a pledge that none but union laborers be employed, and their practical control of the labor market. The committee reported the entire matter to the association for advice. The report was unanimously adopted. This means a strike of the bricklayers and hodcarriers, and probably of all building trades. If this occurs, it lies with the architects, owners, contractors and material men to combine in a determined lockout until the workmen are ready to go to work and give no more trouble. Building is so unsettled by these petty strikes that the question should be settled, not alone for this year but for the future. A determined stand taken by architects and contractors, with the cooperation of owners, will do this in two weeks at farthest, and the prosperous year Chicago builders have counted upon will yet be realized. Fortunately, the larger amount of work upon the architects' boards is in the way of residences, and the contracting for these will not suffer for a few weeks' delay.

Architect C. M. Palmer reports: For J. W. Anderson, three-story and basement store and flat building, 126 by 52 feet, corner Randolph and Morgan streets. Pressed brick, galvanized iron cornices, composition roof, skylights, closets and baths, mantels, etc.; cost \$40,000. J. W. Anderson, contractor. To be commenced soon. For Potter Palmer, four three-story dwellings, 80 by 54 feet, on Elm street. Stone fronts, copper cornices, skylights, stained glass, closets and baths, furnace heat, hardwood finish, mantels, electric bells, speaking tubes, dumb waiters, etc.; cost \$32,000. Joshua Baydell, mason; Alex. Ross, carpenter. For J. S. Barnes, three-story cutstone residence 25 feet front, 604 Dearborn avenue. Galvanized iron cornices, hardwood finish and tiling, furnace heat, closets and bath, etc.; cost \$16,000; contracts not let.

Architects Flanders & Zimmerman report: For C. E. Pope, one-story store building, 80 by 60 feet, on West Madison street, near Honore; iron fronts, Conn. brownstone trimmings; cost \$16,000. For Board of Education, three-story school building, 40 by 80 feet, on 14th street, near Desplaines street. Anderson pressed brick, Lemont stone

trimmings, steam heat; cost \$40,000. For J. C. Gault, two two-story residences, at 858 and 860 Washington boulevard; stone fronts; cost \$20,000.

Architects Jenney & Otis report: For J. H. Rosenbaum, three-story and basement residence, 25 by 68 feet, 386 La Salle avenue. Brick, molded brick and galvanized iron trimmings, felt roof, iron channels, beams, etc. Hardwood finish and tiling, furnace heat, closets and baths, stained glass, skylights, wood mantels, electric bells, speaking tubes, etc.; cost \$7,000. Robinson & Minor, masons; J. W. Andrews, carpenter. To be commenced at once.

Architect William W. Clay: For H. R. Hageman, two-story and basement and attic residence, 55 by 30 feet; first story pressed brick, second story slate; interior finished in birch and other hardwoods; cost about \$9,000.

Architect S. M. Randolph reports: For L. L. Bond, three-story residence, 26 by 70 feet, 340 Ashland avenue. Stone front, copper cornices, composition roof, furnace heat, closets and bath, stained glass, skylights, hardwood finish, wood mantels, electric bells, and speaking tubes, dumb waiter, etc.; cost \$20,000. For H. C. Durand, plans for two additional stories to Marine Bank building; cost \$20,000. Work will not be commenced for some time. For John E. Turney, two-story residence, 30 by 60 feet, 1238 Washington boulevard. Mica stone front, terra-cotta cornices, composition roof, iron channels, beams, etc., skylights, furnace heat, closets and bath, stained glass, hardwood finish and tiling, wood mantels, electric bells, speaking tubes, etc.; cost \$8,000. Wm. H. Cameron, mason; F. H. Avers & Co., carpenters. For Mrs. E. S. Fabian, eight-story store building, 25 by 82 feet, 235 Jackson street. Pressed brick front, stone trimmings up to third story, composition roof, iron channels, beams, etc.; fireproof, passenger and freight elevators, steam heat and power, skylights, closets, etc., long leaf yellow pine finish; cost \$20,000; to be commenced at once. For estate of W. J. Johnson, Charles Goodman, trustee, eight-story building adjoining, and the same design as the above, 50 by 82 feet; cost \$60,000; to be commenced at once. For C. F. DeGolyer, four-story brick warehouse, 110 by 159 feet, corner of Carroll and Sacramento avenues; galvanized iron cornices, composition roof, skylights, freight elevator, steam heat and power; cost \$30,000. James Bloomfield, mason; F. H. Avers & Co., carpenters.

Architect Geo. Beaumont reports: For Jacob Cohn, two-story and basement residence, 25 by 70 feet, on Vernon avenue near 34th street, brick, stone trimmings, galvanized iron cornices, composition roof, skylights, closets and bath, stained glass, furnace, hardwood finish, wood mantels, electric bells, speaking tubes; cost \$10,000; contracts let. For C. W. Nichols, three-story and basement store and flat building, 86 by 92 feet, on corner of Maple street and Wentworth avenue, Englewood, brick, stone trimmings, galvanized iron cornices, composition roof, closets and baths, stained glass, skylights, electric bells, speaking tubes, stained glass, marble mantels; cost \$20,000; contract let. For R. F. Saxon, two-story flat building, 20 by 50 feet, on Warren, west of Western avenue, brick and stone, composition roof, galvanized iron cornices, closets and bath; cost \$3,000; contract let.

Architect Clinton J. Warren, reports: For Chas. Kohl, two-story and attic and basement residence, 30 by 70 feet, on Vernon avenue, brick and stone, copper cornices, slate roof, hardwood finish and tiling, wood mantels, furnace heat, closets and bath, electric bells, speaking tubes, etc.; cost \$12,000.

Architects Edbrooke & Burnham report: Englewood First M. E. Church, pressed brick, stone trimmings, galvanized iron cornices, slate roof, iron channels, beams, etc., furnace heat, closets, stained glass; cost \$27,000; Allen & Gindele, contractors.

Architect H. R. Wilson reports: For H. R. Wilson, three-story and basement dwelling, 42 by 70 feet, on South Park avenue near 33d street, rock faced Bedford stone front, felt roof, copper cornices, hardwood finish and tiling, mantels, skylights, stained glass, closets and bath, hot air heat, electric bells and speaking tubes; also stable; cost \$18,000; commenced May 1.

Architects Thomas & Rodger report: For David Pyott, five three-story dwellings, 98 by 60 feet, 299 to 307 Ashland avenue, Portage brownstone front; cost \$30,000; under way; Thos. Nicholson, mason; Wardman Bros., carpenters.

Architect J. Speyer reports: For Mrs. Kinnere, three-story hotel building, 22 by 72 feet, on canal street south of Madison, pressed brick, stone trimmings, composition roof; cost \$11,000; commenced May 3; F. C. Naegle, contractor. For D. Ward, two-story brick slaughter house, 50 by 180 feet, on Elston avenue; cost \$10,000. For John Warner, three-story flat building, 41 by 80 feet, on LaSalle near 26th street, pressed brick, stone trimmings; cost \$10,000; not yet commenced. For James Maher, three-story flat building, 45 by 61 feet, on 35th street near the lake, pressed brick, stone trimmings; not yet commenced.

Architect L. G. Halberg reports: For Talbot & Keith, five two-story residences, 17 by 53 feet, on Elm street near Lake Shore drive, two of Ohio brownstone and three of Columbia stone; cost \$30,000; Barker & Son, masons; Dowling Bros., carpenters; to be commenced at once.

Architect Jos. L. Silsbee reports: For the Chicago Telephone Co., seven-story office building, 40 by 90 feet, at 203 and 205 Washington street, pressed brick, stone and terra-cotta, iron roof, iron channels, beams, etc., fireproofed, passenger and freight elevators, steam heat and power, electric lighting, hardwood finish and tiling, closets, skylights, etc.; cost \$70,000.

Architect A. Cudell has prepared plans for repairs, etc., for Mrs. Mary Lehman, on the building at 206 to 212 Wabash avenue, recently occupied by J. J. McGrath, and gutted by fire; building is 72 by 161 feet, stone front, six stories high; the repairs, which will cost about \$30,000, will be commenced as soon as the insurance can be adjusted; contracts not yet let. For Fred. Meine, four-story store and flat building, 25 by 75 feet, on North avenue near Sedgwick street, St. Louis pressed brick, stone and terra-cotta trimmings; cost \$12,000; to be completed August 1; C. Thiele, mason; A. M. Maugson, carpenter.

Architect T. V. Wadskier reports: For Wallace De Wolf, seven three-story and basement stores and flats, 112 by 64 feet, Wentworth avenue and Sixty-third street; brick, stone and terra-cotta trimmings, galvanized iron cornices, composition roof, skylights; cost \$40,000; contracts not let. For John Brenock, five three-story and basement stores and flats, 110 by 62 feet, corner of Halsted and Forquer streets; pressed brick, stone and terra-cotta trimmings, galvanized iron cornices, felt roof, skylights, closets and baths, marble mantels; cost \$30,000; contracts not let. For same party, three-story and basement store and flats, 25 by 82 feet on Halsted street, south of Forquer street; same material as above; cost \$8,500; contracts not let. For Geo. L. Otis, three-story and basement residence, 30 by 80 feet, at 1710 Michigan boulevard; rockfaced blue Bedford stone, iron roof, iron channels, beams, etc.; closets and bath, steam heat, wood mantels, dumb waiters, electric bells, speaking tubes, etc.; cost \$25,000; contracts not let. For Wm. Luff, three-story frame dwelling, at Oak Park; cost \$4,500; contracts not let.

Architects McAfee & Lively have let contracts for Mrs. L. Black, for two-story and basement flat building 23 by 52 feet, on Webster avenue near Halsted street; brick and stone, galvanized cornices, felt roof, closets and baths; cost \$4,500. Hodgson, mason.

Architect Otto H. Matz reports: For L. C. Collins and James J. Coughlin, three-story and basement store and flat building 46 by 90 feet, at 246 and 248 North State street. St. Louis pressed brick, terra-cotta trimmings, plate glass; cost \$18,000; nearly completed. For F. Colpaenter, three-story and basement brick store and flat building, 24 by 70 feet, on South Halsted street; cost \$8,000. For C. Ries, block of brick buildings, 160 by 65, and 75 feet; Anderson pressed brick, brownstone and terra-cotta trimmings; cost \$40,000. For Oscar Matthai, enlarging concert pavilion at 461 and 463 North Clark street; steam heat, etc.; cost \$8,000.

Architects J. F. & J. P. Doerr report: For John Wiese, two-story and basement brick building, 22 by 50 feet; cost \$4,000 up to second floor. A. Meagher, mason; John Kruse, carpenter. For Kathman & Steinborn, three-story and basement and attic; stone front building, 50 by 80 feet; 2804 and 2806 wentworth avenue; cost \$18,000; nearly completed. George Schneider, mason; John Kruse, carpenter. For Henry Martin, two-story and basement frame dwelling 24 by 60 feet, on Wabash avenue near 43d street; cost \$4,500; under way. Gutrich Bros., masons; John Kees, carpenter. For M. Gregor, three-story brick flat building, 22 by 50 feet; cost \$5,000; laying foundation. George Schneider, mason; Adolph Mueller, carpenter. For F. Klein, three-story and basement store and flat building, 25 by 78 feet, 3724 State street. Brick and stone; cost not estimated; taking bids. For A. Martin, three-story and basement brick and stone, store and flat building, 24 by 58 feet, corner of 23d street and Portland avenue; taking bids. For W. L. Beck, three-story and basement brick and stone, store and flat building, 25 by 90 feet; southeast corner of Cottage Grove avenue and 42d street; cost \$10,000; nearly completed. Mr. Morgan, mason.

Architect August Bessler reports: For Herman Naumann, two-story and basement flat building, 22 by 47 feet; Indiana brick, Bedford stone trimmings; cost \$4,000; under way. For Fred Matz, three-story tenement, 23 by 66 feet; on Armitage avenue near Robey street; Indiana pressed brick, stone trimmings, etc.; cost \$5,100; under way. For Nic. Balles, two-story and basement store building, 24 by 72 feet, at 607 West Taylor street; St. Louis pressed brick, Lemont stone trimmings; cost \$4,500; under way. For Mrs. C. Groh, two-story and basement tenement building, 22 by 68 feet; Indiana pressed brick, stone trimmings; cost \$5,200; under way. For Chas. Zabel, three-story and basement flat building, 22 by 50 feet; Indiana pressed brick, stone trimmings; cost

\$4,600; under way. For Michael Hofert, two-story store and flats, 22 by 50 feet; Indiana brick; cost \$3,500; under way. For Andrew Dressel, three-story stores and flats, 48 by 48 feet, corner of Taylor and Olive streets; St. Louis pressed brick, stone trimmings, all modern improvements; cost, \$9,000; under way. For Henry Spattenstein, three-story flat building, 22 by 51 feet, on Newberry avenue near Maxwell street; Indiana pressed brick, stone trimmings, modern improvements; cost \$4,100. For John Carey, two-story and basement flat building, 22 by 56 feet, on Paulina street near Taylor; St. Louis pressed brick, Bedford stone trimmings, modern improvements; cost \$4,500; under way.

Architect F. R. Shock reports: For M. F. Klees, two-story and basement residence, 25 by 60 feet, on Huron near State street, stone, marble trimmings, copper cornices, modern improvements; cost \$8,000. For A. L. Brooks, three-story store and flat building, 25 by 72 feet, on Lake street near Sheldon, brick and stone; cost \$8,000. For F. R. Millard, two-story and basement residence, 25 by 75 feet on Warren avenue, near Robey street; cost \$6,000.

Architects Ackermann & Sunderland report: Completed the Jewish Synagogue, 82 by 80 feet, corner of Clinton and Judd streets, pressed brick trimmed with Hummelston brownstone; cost \$51,000; F. C. Neagel & Son, contractors. For S. Lavis, two-story store and flats, 44 by 60 feet, on West Madison street near Western avenue; cost \$10,000; plans being figured. For Thos. Hennessey, four-story and basement factory building, 51 by 106 feet, on Desplaines street near Polk, pressed brick, limestone trimmings; cost \$15,000; P. Hayes, contractor; Hennessey Bros., carpenters.

Architect Clarence L. Stiles reports: For J. D. Osgood, two-story residence, 25 by 66 feet, on Irving place near Van Buren street, brick, stone trimmings; cost \$6,000. For E. J. Wilber, two-story residence, at Woodlawn, brick, frame and slate; cost \$6,000; to be commenced at once. For School Board, at Clyde, Ill., two-story school house, brick and terra-cotta; cost \$9,987; Worley & Lefler, contractors. For J. J. Smith, four-story building, 28 by 80 feet, on West Jackson street; taking figures; cost about \$12,000. For same party, two-story store building, 25 by 70 feet, on Ogden avenue and Fairfield street, brick and stone; cost \$6,500; M. La Croix, mason; Chas. Carpenter, carpenter.

Architect H. B. Wheelock reports: For E. Morrison, nine three-story and basement stores and flats, 200 by 101 feet, corner of Halsted and Monroe streets. Brick, stone trimmings, galvanized iron cornices, tin and felt roof, iron channels, beams, etc.; freight elevators, skylights, closets, hardwood finish, wood mantels, electric bells; cost \$100,000; to be commenced at once.

L. B. Dixon reports: For Lakeside Club, three-story and basement club house, 50 by 160 feet, on Indiana avenue, near 31st street; brick, brownstone trimmings; cost \$20,000; to be commenced May 15; John Angus, general contractor; W. Jackson, mason.

Architect W. W. Boyington reports: For H. C. Sampson, three-story flat building, 42 by 70 feet, corner of Henry and 14th streets. Pressed brick, terra-cotta trimmings, galvanized iron cornices, skylights, closets, wood mantels; cost \$9,000; to be commenced at once. For H. H. Blake, three-story and basement residence, 30 by 70 feet, on Michigan boulevard. Pressed brick, terra-cotta trimmings, hardwood finish, hot air heat, skylights, stained glass, closets and bath, wood mantels, etc.; cost \$15,000; J. F. Halls, mason; D. G. Phinister, carpenter. For S. F. Johnson, three-story store and flat building, 25 by 69 feet, corner of Fremont and Center streets. Pressed brick, terra-cotta trimmings; cost \$7,200.

Carthage, Ind.—Architect Jno. A. Hasecoeter, of Richmond, reports: For C. M. Parker, two-story frame dwelling, nine rooms, slate roof; cost \$3,000; projected.

Cincinnati, O.—Reported by Mr. Lawrence Mendenhall: The strike hinted at in my last report is now on in full force, and, as a result, not much building is going on except excavating and foundation work. The stonecutters' bosses are firm in their determination to pay 45 cents per hour for nine hours' work. The architectural iron men are equally determined, while the planing mills have not changed their position one iota, requiring ten hours' pay for ten hours' work. The latter have advertised for outside help, all that come being under police protection. Violence is not being used, but the police are simply there to protect the mill men from the "walking delegates," who try to enter the premises and use their "persuasive eloquence" and sophistry upon the men who are willing to work. Very little carpenter work is being done, except where it is absolutely necessary. A very important meeting of owners, contractors and architects was held on April 23 at the Builders' Exchange, at which meeting nine hours were adopted as a day's labor, taking effect May 1.

The mayor appointed Architect Walter Forbush as building inspector under new building laws. These laws, while imperfect, are good ones, and when once made operative, their defects can be determined and easily rectified.

The governor has appointed Messrs. W. B. Smith, E. Cort Williams and Sol. P. Kincaid as trustees to build the Hamilton County Armory.

The commissioners of our centennial exposition are fairly booming it, and have selected the following architects to prepare sketches (only), each to receive \$100, viz.: Samuel Hannaford, H. E. Siter, G. W. Rapp, G. W. Drach, Chas. Crapsey and Wm. M. Aiken. The building will be cruciform in shape, 400 by 600, and 100 feet wide, and will occupy Washington Park, opposite the present music hall and exposition buildings. In addition, the canal will be covered, and its banks utilized.

The city hall commission consists of James M. Glenn, Robt. Allison, Chas. A. Miller and Thos. B. Paxton, and is a most excellent body. The board will pay \$1,500 to best design or employ the designer as architect, and pay \$300 to each of the five next best designs.

Architect E. Anderson reports the following: W. & R. Kirby will build an apartment house, five stories high, of brick, with freestone cappings. The lot, 18 by 82 feet, which is small, has been well utilized, and the flats are exceedingly comfortable in all their arrangements. Additions and alterations to the residence of C. W. Withenburg, at Glendale, Ohio. The First National Bank of Connersville, Ind., will build an extension of fifty feet on the Fifth street side, which will add two stories and a half to the already extensive improvements now in process of erection from plans by the same architect. Prospects fair.

Architect H. E. Siter is busy preparing the plans for A. H. Hinkle's residence. This was a competition job between Bruce Price, Wm. M. Aiken, A. O. Elzner and H. E. Siter, the last being the successful competitor. The plans submitted, each and every one, showed careful study, and Mr. Hinkle would have had a truly beautiful mansion had he accepted any one of the designs. Mr. Siter's plan and design adds fresh laurels to his growing reputation as a thorough, conscientious architect. He has also prepared plans and sketches for the Third National Bank building, and the same have been accepted. His time is fully occupied.

Architects Saml. Hannaford & Sons have their time fully occupied, the following being a few of the plans under way: For Wm. Ernst, Esq., Covington, Ky., a pressed brick dwelling two and a half stories high, with slate roof and hardwood finish. Scott's Pottery Building, four stories high, built of brick, with slate roof, size about 32 by 120 feet. For Mr. Geo. Scott, a brick residence, two and a half stories, with slate roof. For the A. W. Frank estate, a six-story store building, 75 by 90 feet. The first two stories are of iron, the balance of stone. For David W. Banning, Esq., a handsome brick residence, hardwood finish, etc. The residence will be two and a half stories high, and covered with slate.

Architect W. W. Franklin reports the following plans on the boards: For John Dardis, a brick building for stores and flats, three stories high; cost \$8,000. For Geo. S. Horner, Woodlawn, Ohio, two frame houses of eight rooms each and slate roof, pine finish; cost \$7,000. Colored school house at Newport, Ky., to be built of brick, two stories high, size 25 by 40 feet; cost \$3,000.

Architect Geo. W. Rapp has the following large building on the boards: The Cincinnati Ice Manufacturing and Cold Storage Co., will build a mammoth cold storage house, of brick, seven stories high, laid up in brown mortar. The shape is irregular, being 200 feet front by 104 feet on the east, and 75 feet on the west side in depth. Hollow tile will be used for partitions and insulation of walls, and asphalt will be used for flooring. On the first floor will be placed the machinery, four large Arctic ice machines, and eight ice tanks 24 by 28 feet. Railroad switches will connect with building, and ample facilities, platforms, etc., will be afforded for shipping and receiving; cost \$150,000. The plans and details reflect great credit upon Mr. Rapp.

Architect Gustave W. Drach is busy on plans for bird of prey house, wolf pit, and buffalo house, for our zoological garden. The bird of prey house will be built of iron and wire, and will be 80 by 20 feet, and 40 feet high; probable cost, \$5,000.

Architect A. O. Elzner reports the following: Western German Bank building to be built on the corner of Twelfth and Vine streets, of sandstone, five stories high. The lower floor will be used by the bank as offices, and the upper floors will be used for offices and flats. There will also be a safety deposit vault on first floor. Extensive remodeling of large dwelling for Geo. Wildeman, Esq., For D. Baumgartner, Esq., a stone residence, two and a half stories, with tile roofing, twelve rooms, with hardwood finish, etc.

Columbia City, Ind.—Architect B. S. Toland, of Fort Wayne, reports: For Whitley county, court house, 100 by 128 feet, stone, fireproof construction; cost, \$150,000; projected.

Clay Centre, Kan.—Architects W. R. Parsons & Son, of Topeka, report: Two-story brick schoolhouse, 75 by 80 feet; cost \$15,000; contract let May 9th.

Coolidge, Kan.—Architects W. R. Parsons & Son, of Topeka, report: Two-story stone school house, 70 by 80 feet; cost, \$11,000; under way; Hollaman, builder.

Curtis, Neb.—The M. E. Church society are building a church, to cost \$2,200; J. H. Adams, contractor. Furnace and furnishing goods are wanted. J. P. Hymer is chairman of the building committee.

Detroit, Mich.—Architects Pond Brothers of Chicago, report: Remodeling Detroit Opera House, five-story building, 100 by 142 feet, stores and offices in front, Masonic Hall in top story; cost \$50,000. For Ashley Pond, two-story and attic semi-detached residences, 50 by 65 feet, brick, furnace heat, closets and bath, stained glass, skylights, electric bells, wood mantels, etc.; cost about \$9,000.

Davenport, Iowa.—Architect F. G. Clausen reports: For Davenport Turner Hall Building Association, three-story brick building, 150 by 140 feet, to be used as turner hall and theater; estimated cost, \$70,000; projected; contracts not let. For John Hagebock, store building, 40 by 68 feet; cost, \$8,000; under way; separate contracts.

Des Moines, Iowa.—Architects Hackney & Merrill report: Outlook is more promising than for some time past. A great deal of residence work is under way. We have, at present, for Stacy Johns, two-story frame dwelling, 34 by 60 feet; cost, \$6,000; under way. For A. J. Baker, addition; cost, \$1,000. For Governor's Guards, brick and stone armory building, 66 by 132 feet; cost, \$15,000; projected. For J. H. York, three-story brick and stone store and hotel building, 40 by 110 feet; cost, \$15,000; under way.

Dubuque, Iowa.—Architect F. D. Hyde reports: For Staples & Vibber, two four-story brick stores, 43 by 114 feet, pressed brick and terra-cotta; cost \$15,000; under way. For D. C. Cram, two-story brick and shingle residence, 28 by 45 feet; cost \$3,500; under way.

Duluth, Minn.—Architects Willcox & Johnston, of St. Paul, report: Have prepared plans for the Pilgrim Congregational Church, to be built of red sandstone, slate roof, steam heat, closets, hardwood finish and tiling, stained glass, pews, cushions, organ, pulpit furniture; cost \$35,000; to be commenced at once.

Architects Burnham & Root, of Chicago, Ill., report: For John Culliford, six-story addition to brick hotel, 80 by 150 feet; cost not estimated.

Eaton, O.—Architect John A. Hasecoeter, of Richmond, Indiana, reports: For Andrew Hiestand, seven-room brick dwelling, slate roof; cost \$4,000; projected; also six-room frame dwelling, slate roof; cost \$2,500; projected.

El Dorado, Kan.—Architects W. R. Parsons & Son, of Topeka, report: For Masonic Society, stone and brick hall building, 55 by 106 feet; cost \$18,000; plans finished. For Woman's Christian Temperance Union, stone and brick building, 27 by 106 feet; cost \$8,000; plans finished.

Evansville, Ind.—Architects Reid Bros. report: For James L. Orr, three-story and basement block of stores, 124 by 150 feet, pressed brick and stone, rolled beams, plate glass, hand elevator, fire escapes, etc.; Masonic hall on third floor; cost \$50,000; contract for brickwork let. For J. W. James, three-story and basement office building, 50 by 65 feet, stone front, steam heat; cost \$15,000; contract not let.

Fremont, Neb.—Architect F. M. Ellis, of Omaha, reports: For Henry Fuhrman, three-story and basement store building, 44 by 125 feet, pressed brick fronts; cost \$13,000. For Episcopal Society, stone church building; cost not estimated.

Fort Smith, Ark.—Architects Nier, Hogg & Bryam, of Kansas City, Mo., report: For Sebastian county, stone, brick and terra-cotta court house and city hall, 84 by 100 feet; cost \$50,000; bids opened May 2.

Fort Wayne, Ind.—Architects Wing & Mahurin report: For V. M. C. A., three-story and basement brick, stone front building, 40 by 100 feet, tin roof; cost \$15,000; under way; separate contracts.

Architect H. W. Matson reports: For Edward Seidel, two-story brick and stone residence, 28 by 60 feet, slate roof; cost \$5,000; projected. For Judge L. M. Winde, three-story brick store and office building, 50 by 70 feet, tin roof; cost \$8,000; under way. Fred Kraft and Jacob Balters, builders. For A. L. Griebel, two-story frame dwelling, 34 by 56 feet, slate roof; cost \$5,000; under way. Fred Kraft, builder. For Samuel Bidler, two-story frame dwelling, 32 by 54 feet; cost \$4,000; projected. For Berry street M. E. Church, brick and stone building, 60 by 150 feet, slate roof; cost \$25,000; projected. For Thomas Ahern, three-story brick store building, 23 by 75 feet, tin roof; cost \$5,500; under way. Wm. Moelinger, builder. For Louis Brame, three-story brick factory building, 45 by 80 feet; under way. Kraft & Balters, builders. For C. W. Jacobs, two-story brick dwelling, 34 by 60 feet, slate roof; cost \$5,300; under way. Miller & Schall, builders. Also a number of dwellings ranging in cost from \$1,200 to \$2,000.

Garfield, Kan.—Architects W. R. Parsons & Son, of Topeka, report: Two-story brick and slate school house, 45 by 60 feet; cost, \$6,000.

Guelph, Ont.—Season is very late; prospects fair, compared with last year.

Architect John Day reports: For John Hogg, block of four houses; cost, \$11,000; under way. Kennedy & Son, builders. For J. E. McEldery, two semi-detached houses; cost, \$5,000; under way. Kennedy & Son, builders. For Capt. Gordon, two semi-detached houses; cost, \$5,000; under way. A. Brue & Son, builders. Also, smaller work, under way and projected, for different parties, and a block of stores for John I. Hobson, at Fergus.

Hartland, Kan.—Architects W. R. Parsons & Son, of Topeka, report: Two-story brick and slate school building; cost \$11,000; plans finished.

Havana, Ill.—Architect W. A. Corwine of Lincoln, reports: For Mason County, one-story, brick, fireproof office building 60 by 88 feet, tin roof, stone floors, iron beams, corrugated ceilings with concrete fillings; cost \$10,987. Wm. M. Allen, of Peoria, contractor.

Hope, Kan.—Architect Geo. W. Shaffer, of Abilene, reports: For W. P. Robinson, two-story brick and stone bank and dwelling 25 by 60 feet; passenger elevator, vaults, tin roof, stained glass; cost \$6,000; under way.

Hudson, Wis.—Architects Allen & Patten of Minneapolis, Minn., have prepared plans for the Board of Education for a two-story brick and stone school building, galvanized iron cornices, hardwood finish and tiling, hot air heat, stained glass, etc.; cost \$18,250; contract awarded to Thos. Rundell, of Mankato, Minn., Simon Hunt, Supt. of schools.

Hutchinson, Kan.—Architect L. M. Wood of Topeka, reports: For Hutchinson Opera House Co., opera house building, 50 by 120 feet; cost \$40,000. For school board, two-story brick school building; cost \$13,000.

Architect E. P. Brink of Kansas City, Mo., reports: For Rock Island Hotel Co., four-story stone, brick and iron hotel building, 100 by 150 feet. Steam heat, electric lighting, marble tiles, all modern improvements; cost \$100,000; under way.

Independence, Mo.—Architects Nier, Hogg & Bryam of Kansas City, report: For McWilson Bros., three-story store building 86 by 148 feet; cost \$15,000; taking figures.

Kansas City, Mo.—Present condition is very good, and outlook is for a very busy season.

Architect E. P. Brink reports: For Tullis & Ray, fourteen three-story and basement residences, 280 by 40 feet; brick and stone, slate and gravel roof; cost \$90,000; under way. T. C. Carpenter, foreman of work. For H. A. Garland, block of eighteen four-story residences, 370 by 40 feet; stone and brick, slate roof; French Renaissance style; natural gas; mantels in every room; cost \$130,000; under way. W. L. Powell, foreman of work. For R. E. Higgs, block of ten residences 230 by 38 feet; stone, iron and brick; all modern improvements; cost \$75,000; under way. Jacob Michler, foreman of work. For Evans & Sturtevant, eight stone and brick residences, 146 by 50 feet; slate roof, furnace heat; cost \$60,000; under way. For F. C. Marsh, three elegant residences, 68 by 62 feet; brownstone front, slate roof, furnace heat; all modern improvements; cost \$25,000; under way. Mr. Stremple, foreman of work. For Wm. H. Winants, residence 36 by 60 feet; pressed brick, stone trimmings, slate roof, furnace heat; modern improvements; cost \$12,000; under way. Mr. Stremple, foreman of work. For R. E. Higgs, three stone residences 50 by 40 feet; slate roof, galvanized iron cornices and bays; steam heat; cost \$20,000; under way. Jacob Michler, foreman of work.

Architects Nier, Hogg & Bryam report: For Ferguson & Albright, store building 96 by 100 feet; cost \$25,000. For W. M. Abernathy, residence 31 by 60 feet; cost \$7,000; preparing plans.

Kankana, Wis.—Architects H. C. Koch & Co., of Milwaukee, report: For M. L. S. & W. R. R., repair shops 80 by 200 feet; cost \$14,000; contract not let.

Kearney, Neb.—Architect F. M. Ellis, of Omaha, reports: For State Industrial School, two family buildings, 50 by 54 feet, one bakery building, 20 by 32 feet, laundry building, three stories, two out houses; all brick; cost \$80,000; contracts not let.

Lake Forest, Ill.—Architect S. M. Randolph, of Chicago, reports: For Calvin Durand, additions, etc., to residence; cost \$10,000.

Lemars, Ia.—Architects Martin & Batwell of Sioux City, report: For C. H. Kluckholm, brick block, 60 by 90 feet; cost \$12,000; under way. J. H. Partridge, builder. For J. H. Partridge, brick block 25 by 100 feet; cost \$8,000; under way. J. H. Partridge, builder.

Lincoln, Ill.—Architect W. A. Corwine reports: For Vincent Cherney, alterations, etc.; cost \$1,000. For Jos. Landaur, alterations, etc.; cost \$1,100. Fair outlook; mechanics in building trades are all busy.

Lincoln, Neb.—Architect F. M. Ellis, of Omaha, reports: For H. T. Clark, four-story store building, 142 by 100 feet, pressed brick front, cost \$75,000; under way.

Architect Wm. Gray reports: For Grant Sheldon, two-story, attic and basement residence, 64 by 65 feet, slate roof; cost \$20,000; Jensen, builder. For same party, three-story and basement brick and stone store and office building, 24 by 142 feet, tin roof; cost \$15,000; plans on the boards. For same party, three-story and basement brick store and tenement building, 51 by 74 feet, tin roof; cost \$12,000; plans on the boards. For Miss M. Seilbridge, three-story and basement store, office and tenement building, 25 by 142 feet, brick and stone, tin roof; cost \$16,000; just commenced. For English Lutheran Society, one-story and basement building, 50 by 84 feet; plans completed. For A. Swing, two-story frame dwelling, 35 by 53 feet; cost \$4,200; J. V. Consaul, builder. For Bentz & Swing, three-story store and tenement building, 51 by 60 feet, brick and stone, tin roof; cost \$8,000; C. H. Miller, builder. For C. O. Strickland, three-story store and office building, 23 by 90 feet; brick and stone, tin roof; cost \$8,000; J. V. Consaul, builder.

Little Rock, Ark.—Architect Thos. Harding has planned for Walter Whitney, a very handsome residence.

Architect M. A. Orlopp has planned a two-story office building for Samuel Smith. Great activity in small residence work, but little of importance.

Bids will be received until June 6, by the Board of Penitentiary Commission for repairs on Penitentiary building; Estimated cost \$10,000.

Logansport, Ind.—Architect John S. McKean, of Chicago, Illinois, reports: For Cass County, court house, 45 by 125 feet; pressed brick, stone trimmings; cost \$45,000.

Lyons, Kan.—Architect L. M. Wood of Topeka, reports: For T. A. Butler, two-story frame residence 48 by 70 feet; cost \$9,000.

Marmouth, Ind.—Architect H. W. Matson of Fort Wayne, reports: Brick and stone school building 34 by 48 feet; slate roof; cost \$4,000; not yet commenced.

Marquette, Kan.—Architects Abbott & Hopenschild, of Salina, reports: For Bank of Marquette, two-story brick bank building, 25 by 80 feet; I. O. O. F. hall on second floor; felt roof; cost \$5,000; bids advertised for. For J. S. Winne, two-story brick building, 25 by 80 feet; cost \$4,000; bids advertised for.

Mason City, Ill.—Architect W. A. Corwine, of Lincoln, reports: For Well Houseworth, two-story frame dwelling 28 by 44 feet; cost \$1,800; projected.

McPherson, Kan.—Architect Geo. W. Shaffer of Abilene, reports: For E. G. Clarke, two-story frame dwelling 50 by 63 feet; closets and bath; hardwood and California redwood finish, mantels, steam heat; cost \$9,000; projected.

Architects W. R. Parsons & Son of Topeka, report: Three-story brick high school building 90 by 90 feet; cost \$24,000; plans prepared and bids called for.

Milwaukee, Wis.—Building outlook is favorable unless the carpenters should strike, in which event building operations would be stopped.

Architects K. C. Koch & Co., report: For B. J. Johnson & Co., five-story brick store and factory building 50 by 150 feet; cost \$24,000; under way. P. Van Roo & Co., builders. For G. W. Ogden & Co., four-story and basement store and factory; brick building 60 by 125 feet; cost \$23,000; under way. Bently & Strachota, builders. For E. R. Pantke, block of six three-story brick dwellings 60 by 122 feet; cost \$22,500; under way. P. Van Roo & Co., builders. For Henry Niblein, brick residence 44 by 72 feet; also stable; cost \$30,000. Wm. Pilger, builder. For G. H. Heineman, brick residence 42 by 68 feet; also barn; cost \$22,000; under way. F. L. Vogle & Sons, builders. For Leo Roth, brick residence 40 by 65 feet; cost \$11,000; under way. Jos. Buchanan, builder. For St. John's congregation, two-story and basement brick school building 48 by 86 feet; cost \$14,000. John Langenberger, builder. For J. H. Tweedy, Jr., two-story brick residence 40 by 55 feet; cost \$11,000. Ferge & Kiepper, builders. For City of Milwaukee, three-story brick school building 80 by 100 feet; cost \$24,000; under way. J. H. Lemcheck, builder. For Wm. Buorlein, brick and frame residence, 32 by 50 feet; cost \$8,000; projected. For J. W. Johnke, frame dwelling 21 by 44 feet; cost \$2,500; under way. John Buchanan, builder.

Mobile, Ala.—Architect James H. Hutchison reports: Present condition and outlook is excellent. For Theo. Guesnard two-story, double frame cottage; cost \$5,250; under way. J. P. Emerich & Son, builders. For Christ's Church, lecture rooms, etc.; cost \$7,500; preparing plans. For Owen Farley, two-story iron veranda, 68 feet long; cost \$2,000; under way. A. Kling, builder. Also a number of cottages, repair jobs, etc., costing from \$1,800 to \$3,500 each, and aggregating \$17,600.

Monroe, Wis.—Architects H. C. Koch & Co., of Milwaukee, report: For Jac. Karlen, three-story hotel building; cost \$25,000; contract not let.

Muncie, Ind.—Architect H. W. Matson of Fort Wayne, reports: For J. A. Goddard, two-story brick store building 40 by 90 feet; tin roof; cost \$6,000; projected.

Nickerson, Kan.—Architects W. R. Parsons & Son of Topeka, report: Two-story brick school house; cost \$11,000. Plans in preparation.

Norfolk, Neb.—Architect F. M. Ellis, of Omaha, reports: For State of Nebraska, additions, etc., to insane asylum. Two four-story wings, 40 by 115 feet; kitchen and chapel, 36 by 116 feet, two stories; laundry, boiler house, etc., 48 by 117 feet; all to be built of brick; cost \$90,000; contracts not let.

Omaha, Neb.—Architect F. M. Ellis reports: For Morris & Hobner, three-story store building, 22 by 100 feet; pressed brick front; cost \$6,000. Oliver Smith, builder. For S. R. Brown, three-story store building, 66 by 88 feet; pressed brick front; cost \$25,000. For H. G. Clark, three-story flat building, 25 by 90 feet; pressed brick fronts, modern improvements; cost \$12,000. For Robert McConnell, six two-story residences, 25 by 40 feet. For D. Kerugston, two-story and basement residence, 40 by 60 feet; cost \$7,000. For J. French, two-story and basement residence, 32 by 50 feet; cost \$7,000. Also ten dwellings, average cost \$2,000 to \$3,000 each.

Petersburg, Va.—Architect Oscar Cobb, of Chicago, Illinois, reports: For Petersburg Musical Association, three-story theater building, 76 by 154 feet; pressed brick, terra-cotta and galvanized iron trimmings, tin roof, iron construction, fireproofing, skylights, stained glass, closets, bath, etc., electric bells, speaking tubes, electric lighting; seating capacity 2,500; cost \$40,000; work to begin June 1.

Peterson, Ind.—Architect H. W. Matson of Fort Wayne, reports: Brick and stone school building 34 by 48 feet; cost \$4,000; not yet commenced.

Pierceville, Kan.—Architects W. R. Parsons & Son of Topeka, report: Two-story stone and slate school building 40 by 45 feet; cost \$4,000; under way. Contract let April 28.

Pratt, Kan.—Architects Proudfoot & Bird of Wichita, report: For First National Bank, three-story brick bank building 25 by 100 feet; tin roof; cost \$12,000; foundations let.

Richmond, Ind.—Outlook fair; prospects good for later in the season.

Architect John A. Hasecoeter reports: For Richard Hart, two-story, eight-room frame dwelling, slate roof; cost \$3,000; under way. E. Lank, builder. For J. Emmons, two-story brick residence, eleven rooms, slate mansard roof and tower; cost \$5,300; taking figures. For E. Turner, six-room frame dwelling; cost \$1,500; projected.

Salina, Kan.—Architects Abbott & Hohenschild report: For Oscar Seily, two-story and basement and attic dwelling, 50 by 64 feet; Sterling pressed brick, Warrensburg stone trimmings, all modern improvements, speaking tubes, electric bells, hot and cold water, sanitary plumbing, modern design; cost \$10,000; ready for bids. For Walter F. Williams, two-story frame dwelling, 30 by 40 feet; cost \$2,000; ready for bids. Good opportunity for a good contractor; also stock brick contractor. Have several more buildings on the boards.

Sioux City, Ia.—Architects Martin & Batwell report: For Joseph Sullivan, frame cottage 29 by 40 feet; cost \$2,000; under way. Townsend & Wakefield, builders. For Charles E. Foster, frame cottage 25 by 48 feet; cost \$2,800; under way. D. M.

Killian, builder. For E. E. Selmser, frame cottage 26 by 50 feet; cost \$3,300; under way. M. A. Corneau, builder. For Jonas Cleland, frame dwelling 38 by 68 feet; cost \$5,000; projected. For Dr. J. M. Knott, brick, stone and terra-cotta dwelling 44 by 63 feet; cost \$10,000; projected. For Geo. W. Felt, alterations and additions to brick dwelling; cost \$3,000; projected. For German Catholic Society, two-story brick school building; cost \$5,000; projected. For I. C. R. R., passenger station 16 by 44 feet; under way. Revising and elaborating new opera house at an increased cost of \$20,000; brick, cutstone and terra-cotta.

Architect Oscar Cable, of Chicago, Illinois, reports: For Chamber of Commerce, three-story opera house, 85 by 150 feet; pressed brick, terra-cotta trimmings, galvanized iron cornices, slate or tin roof, iron construction, fireproofing, skylights, stained glass, closets and baths, hardwood finish, mantels, electric lights, bells, speaking tubes, etc.; cost \$50,000; seating capacity about \$2,000.

South Whitley, Ind.—Architects Wing & Mahurin of Fort Wayne, report: For School Board, James Arnold, trustee, two-story brick school building, 71 by 69 feet; slate roof and tower; Ruttan heating and dry closets; cost \$12,000; under way. Separate contracts.

Sparta, Wis.—Architects H. C. Koch & Co., of Milwaukee, report: For State of Wisconsin, School for Independent Children, three buildings; cost \$48,000; contracts not let.

Springfield, Ill.—Present condition good, and outlook better. Indications promise an unusually good season.

Architects Bullard & Bullard report: For Second M. E. Society, one and two-story church building, 60 by 100 feet; to be built of Grafton stone, with Berea sandstone trimmings, slate roof, copper cornices, stained glass, closets, steam heat; cost \$26,000; under way. J. S. Culver, mason; Hullinger & Son, carpenters; Henson Robinson, slate contractor. For C. W. Freeman, three-story and cellar warehouse, 40 by 60 feet, brick, tin roof, elevator, and platform scales; cost \$5,000; drawings made. Hullinger & Son, carpenters; balance day work. For J. M. Britton & S. D. Scholes, three-story and basement business building, 44 by 80 feet; tin roof; cost \$12,000; making sketches. For Christian Church, frame parsonage 30 by 48 feet; furnace heat; cost \$3,500; drawings completed.

Architect C. W. Shine reports: For Dr. H. J. Utley, two-story frame dwelling, 36 by 58 feet; cost \$5,500; contract not let. For E. F. Iler, two-story frame dwelling, 44 by 60 feet; cost \$6,500; contract not let. For Dr. J. M. Dixon, remodeling dwelling; cost \$6,000; drawings completed.

St. Louis, Mo.—Following are the building permits issued during the month of April for buildings costing \$5,000 and upward: P. Oehler, three-story brick store and dwelling, 26 by 71 feet; cost \$6,000; C. Werner, builder. Urseline Academy, four-story brick school building, 78 by 57 feet; cost \$14,000; W. C. Popp, builder. A. Cooper, six two-story brick dwellings, 105 by 41 feet; cost \$15,000; A. Cooper, builder. F. Hugerty, three two-story brick dwellings, 22 by 68 feet; cost \$18,000; F. Hugerty, builder. Mrs. M. A. Schepley, five-story store building, 34 by 119 feet; cost \$30,000; contracts sub-let. C. A. Hammerstein, two two-story brick dwellings, 42 by 63 feet; cost \$6,000; Uhri & Son, builders. Mrs. L. Irante, three two-story brick dwellings, 57 by 53 feet; cost \$7,000; C. Wehking, builder. A. Cooper, seven two-story brick dwellings, 170 by 65 feet; cost \$15,000; A. Cooper, builder. LaCade Gas Co., brick and iron gas house, 119 feet in diameter; cost \$70,000; contracts sub-let. J. Miller, two-story brick flats, 30 by 30 feet; cost \$5,000; L. J. Evans, builder. E. T. Terry, two-story brick carriage house, 50 by 70 feet; cost \$7,300; J. W. Barnes, builder. F. Wiedringhaus, two two-story brick flats, 36 by 63 feet; cost \$6,700; A. Gross, builder. For Mrs. A. S. Morrison, five-story brick store building, 56 by 100 feet; cost \$20,000; G. W. Farnum, builder. J. H. Willi, two-story brick store and dwelling, 36 by 63 feet; cost \$5,000. J. Murphy, three-story brick park house, 60 by 160 feet; cost \$20,000; M. Laine, builder. H. Burnett, three two-story brick stores and dwellings, 50 by 58 feet; cost \$14,000; J. B. Luetsay & Son, builders. J. F. Cordes, three-story brick store and dwelling, 24 by 75 feet; cost \$7,000; H. Schulte, builder. F. Runge, three-story brick store and dwelling, 25 by 80 feet; cost \$7,000; Kerr & Allan, builders. H. J. Linne-mann, two-story brick dwelling, 31 by 66 feet; cost \$13,000; Blikre & Co., builders. Dr. H. Kinner, two-story brick dwelling, 39 by 72 feet; cost \$7,000; Francisco & Sanguinet, builders. Mrs. F. Hindes, two-story brick dwelling, 38 by 46 feet; cost \$7,000; S. P. Johnson, builder. M. Backer, two-story brick dwelling, 23 by 55 feet; cost \$5,000; J. H. Frye, builder. G. O. Hall, two-story brick dwelling, 24 by 55 feet; cost \$6,500; G. O. Hall, builder. Mrs. J. E. Fisher, two-story brick dwelling, 42 by 50 feet; cost \$6,500; Kohlmeier & Son, builders. R. W. Shapleigh, two-story brick dwelling, 39 by 40 feet; cost \$9,000; F. Hollemeyer, builder. L. Schaiff, two-story brick dwelling, 40 by 70 feet; cost \$10,000; S. L. Jones, builder. S. L. Culver, two-story brick dwelling, 32 by 64 feet; cost \$15,000; A. E. Cook, builder. Mrs. L. H. Spencer, two-story brick dwelling, 56 by 36 feet; cost \$7,000; H. E. Roach, builder. H. K. Daves, two-story brick dwelling, 50 by 52 feet; cost \$5,000; H. K. Daves, builder. C. D. Knox, two-story brick dwelling, 35 by 50 feet; cost \$12,000; Kerr & Allan, builders. Mrs. K. Clark, two-story brick dwelling, 40 by 52 feet; cost \$8,500; Kerr & Allan, builders. B. J. Stoffel, two-story brick dwelling, 35 by 33 feet; cost \$5,000; C. Linne-kohl & Co., builders. A. Fehner, two-story brick dwelling, 40 by 73 feet; cost \$23,000; A. Fehner, builder. C. Vieths, two-story brick dwelling, 40 by 73 feet; cost \$23,000; sub-let. Mrs. J. O'Fallon, three-story brick dwelling, 25 by 80 feet; cost \$8,600; B. Brady, builder. A. Cooper, six two-story brick dwellings, 102 by 49 feet; cost \$14,000; A. Cooper, builder.

St. Paul, Minn.—Architects Willcox & Johnston report: For W. C. Riley, block of seven houses, pressed brick with red sandstone trimmings, slate roof, copper cornices, granite columns, wrought iron grilles, plate and stained glass, skylights,

closets and bath, steam heat and power, hardwood finish and tiling, electric bells, speaking tubes, wood mantels, electric lights, dumb waiters, also boiler house; cost \$70,000; F. O'Halloran, F. Romer and Butlar Bros., contractors. For Dr. Wharton, block of four dwellings, brick, red sandstone trimmings, slate roof, skylights, closets and baths, stained glass, hot air heat, hardwood finish and tiling, wood mantels, electric bells, speaking tubes, dumb waiters; cost \$20,000; Ulmer & Smith, Nickel & Dodge and Miller & Doyle contractors. For Cary & Bement, double dwelling, pressed brick, red sandstone trimmings, slate roof, skylights, closets and baths, stained glass, steam heat, hardwood finish and tiling, wood mantels, electric bells, speaking tubes, dumb waiters; cost \$20,000. For Geo. C. Stone, double dwelling, pressed brick, red sandstone trimmings, slate roof, skylights, closets and baths, stained glass, hardwood finish and tiling, steam heat, wood mantels, electric bells, dumb waiters; cost \$25,000. For T. L. Schurmeier, three-story residence, pressed brick, brownstone front, slate roof, closets and bath, stained glass, steam heat and power, hardwood finish and tiling, wood mantels, electric bells, speaking tubes, electric lights, dumb waiters, conservatory; cost \$40,000. City and County Hospital, pressed brick, red sandstone trimmings, slate roof, fireproofed, closets and baths, freight elevators, steam heat and power, hardwood finish and tiling, slate floors, electric bells and lighting, dumb waiters and ventilating fans; cost \$50,000. For School Board, Van Buren School building, brick, stone trimmings, galvanized iron cornices, slate roof, Ruttan system of heating, ventilating and dry closets, hardwood finish and tiling, etc.; cost \$25,000.

Architect A. F. Gauger reports: For James Muir, two-story frame residence, 50 by 70 feet, slate roof, closets and bath, stained glass, skylights, steam heat, hardwood finish and tiling, electric bells, speaking tubes, mantels, dumb waiters, conservatory; cost \$12,000. For C. Larroos, two-story frame dwelling, 26 by 44 feet; cost \$2,400. For School Board, three-story and basement addition, 84 by 102 feet, to Humboldt School building, first story and basement brick, second story stone; cost \$35,000. Addition to Gorman School, two-story and basement, 78 by 52 feet, brick, stone basement and trimmings; cost \$15,000.

Architect C. A. Wallingford reports: For Adam Boyle, two-story frame dwelling, 30 by 55 feet; cost \$7,000. For G. W. McGinnilly, two-story frame dwelling, 26 by 50 feet; cost \$4,000. For C. L. Tracy, two-story frame dwelling, 26 by 50 feet; cost \$4,000. For John Norcott, two-story frame dwelling, 26 by 50 feet; cost \$5,000.

Toledo, O.—Architect H. W. Matson, of Fort Wayne, Ind., reports: For Chas. E. Kaufmann, six-story flat building, 45 by 110 feet, pressed brick, stone trimmings, plate and stained glass, elevators, etc.; cost \$15,000; projected.

Topeka, Kan.—Architect L. M. Wood, formerly of Haskell & Wood, reports: Steam heating, plumbing and water supply for State Reform School; cost \$33,000. For Daniel Cross, two-story frame residence, 40 by 66 feet; cost \$6,000; not let. For John Sebastian, two-story frame residence, 38 by 50 feet; cost \$5,000; not let. For Wallace McGrath, two-story residence, 30 by 45 feet; cost \$2,500. For W. F. McCarthy, two-story brick business block, 50 by 150 feet; cost \$12,000. For City Railway Co., five park buildings; cost \$25,000. For Wight Bros., three-story business block, 50 by 110 feet; cost \$18,000. For Ellinger & Furman, two-story business block, 50 by 65 feet; cost \$8,000.

Vicksburg, Miss.—Present condition good and outlook very good.

Architect W. A. Stanton reports: For Vincent & Hayne, three-story store and office building, 55 by 73 feet, brick and stone, tin roof; cost \$10,000; projected. For S. P. Metzger, two-story frame dwelling, 60 by 73 feet, slate roof; cost \$9,000; under way. Curphrey & Mundy, builders. For S. Swartz, two-story frame dwelling, 49 by 72 feet, tin roof; cost \$6,500; projected. For S. Spengler, two-story frame dwelling, 60 by 92 feet, slate roof; cost \$16,000; projected. For D. Herman, one-story frame hall building, 85 by 65 feet, corrugated iron roof; cost \$3,000; under way. Curphrey & Mundy, builders; also other buildings in charge, costing from \$1,000 to \$1,600 each.

Weeping Water, Neb.—Architect F. M. Ellis, of Omaha, reports: For Congregational Society, stone church building, 50 by 110 feet; cost \$15,000.

Wichita, Kan.—Building outlook good.

Architects Proudfoot & Bird report: For Garfield University, five-story brick and stone building 230 by 200 feet; cost \$200,000; under way. J. H. Campbell, builder. For Judson University, four-story brick and stone building 70 feet front; cost \$100,000; projected. For Y. M. C. A., four-story brick and stone building 75 by 100 feet; cost \$75,000; foundations under way. G. Johnson, contractor. For O. Mathuson, three-story and basement brick and stone building 125 by 80 feet; cost \$40,000; under way. C. H. Elliott, builder. For Lawrence & Seaman, three-story brick and stone building 80 by 100 feet; tin roof; cost \$30,000; foundation let. F. Warneke, contractor. For H. R. Butler, three-story brick and stone building 75 by 100 feet; cost \$23,000; under way. C. H. Elliott, builder. For M. M. Fectheimer, four-story brick and stone building 25 by 130 feet; cost \$22,000. To be completed June 1. Day work. For Rudolph Hatfield, one-story cottage 50 by 64 feet; cost \$6,000; projected. For A. D. Wheeler, two-story pressed brick veneered dwelling 48 by 66 feet; cost \$12,000; under way. Day work. For C. E. Godfreys, two-story frame dwelling 40 by 54 feet; cost \$5,000; under way. For W. A. Norris, two-story frame dwelling 38 by 48 feet; cost \$4,000; under way. For C. H. Humble, two-story frame dwelling 30 by 36 feet; cost \$3,500; under way. F. O. Mathuson, two-story frame dwelling 46 by 54 feet; cost \$6,000; projected. For Mr. Ruttan, two-story brick veneered dwelling 48 by 56 feet; cost \$8,000; under way. For G. C. Strong, two-story frame dwelling 40 by 52 feet; cost \$6,000; under way. For J. L. Dyer, two-story frame dwelling 48 by 64 feet; cost \$7,000; under way. W. H. Sternberg, builder. For R. H. Roys, two-story frame dwelling 34 by 50 feet; cost \$5,000; under way. Day work.

York, Neb.—Architect Wm. Gray, of Lincoln, reports: First Presbyterian Church, building, 55 by 64 feet; cost \$10,000; plans completed.

The Jackson Heat-Saving and Ventilating-Grate.

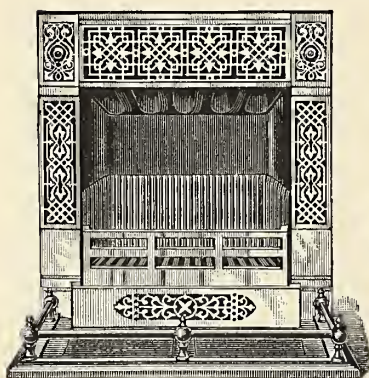
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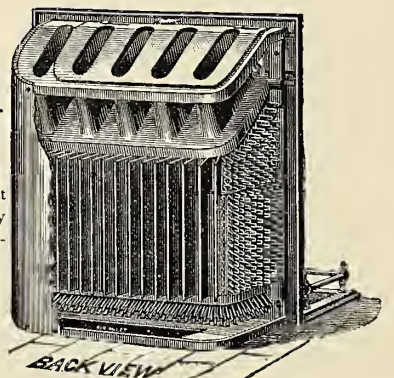
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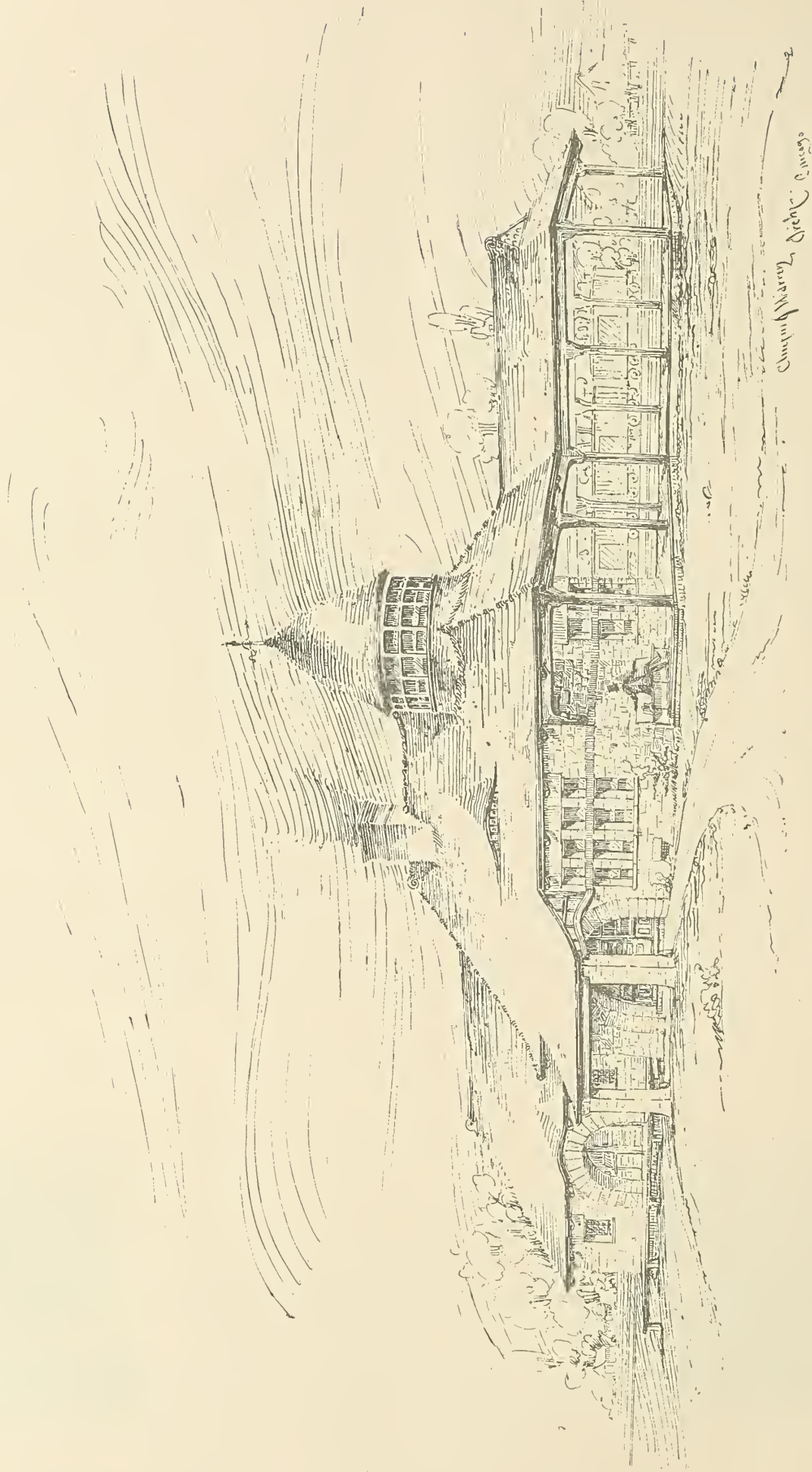


FRONT VIEW.



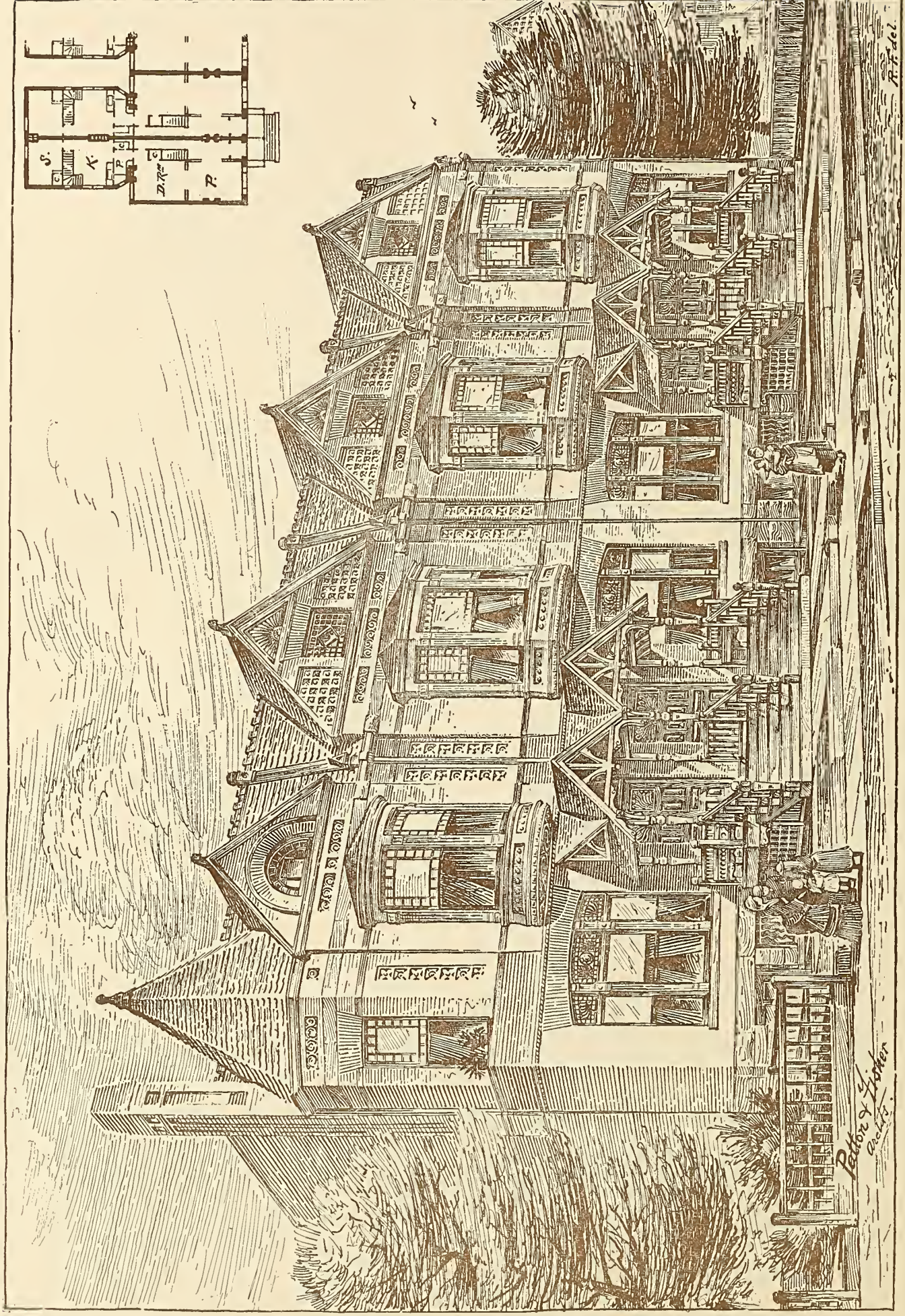
BACK VIEW.

THE HENRY DIBBLEE CO. Chicago Agents.
266 AND 268 WABASH AVENUE.



RAILWAY STATION AT MANITOU, COLORADO.

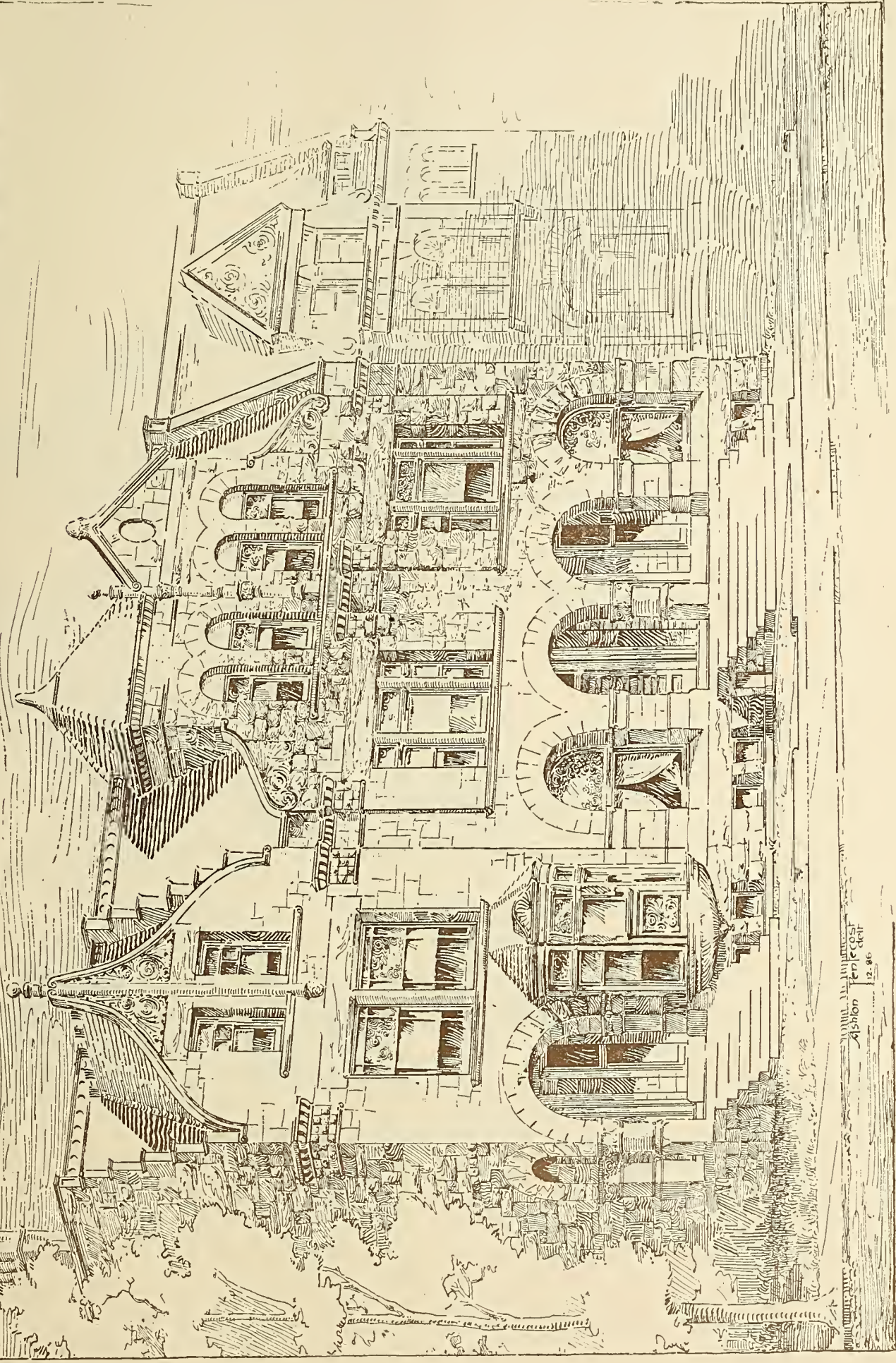
CLINTON J. WARREN, ARCHITECT, CHICAGO.



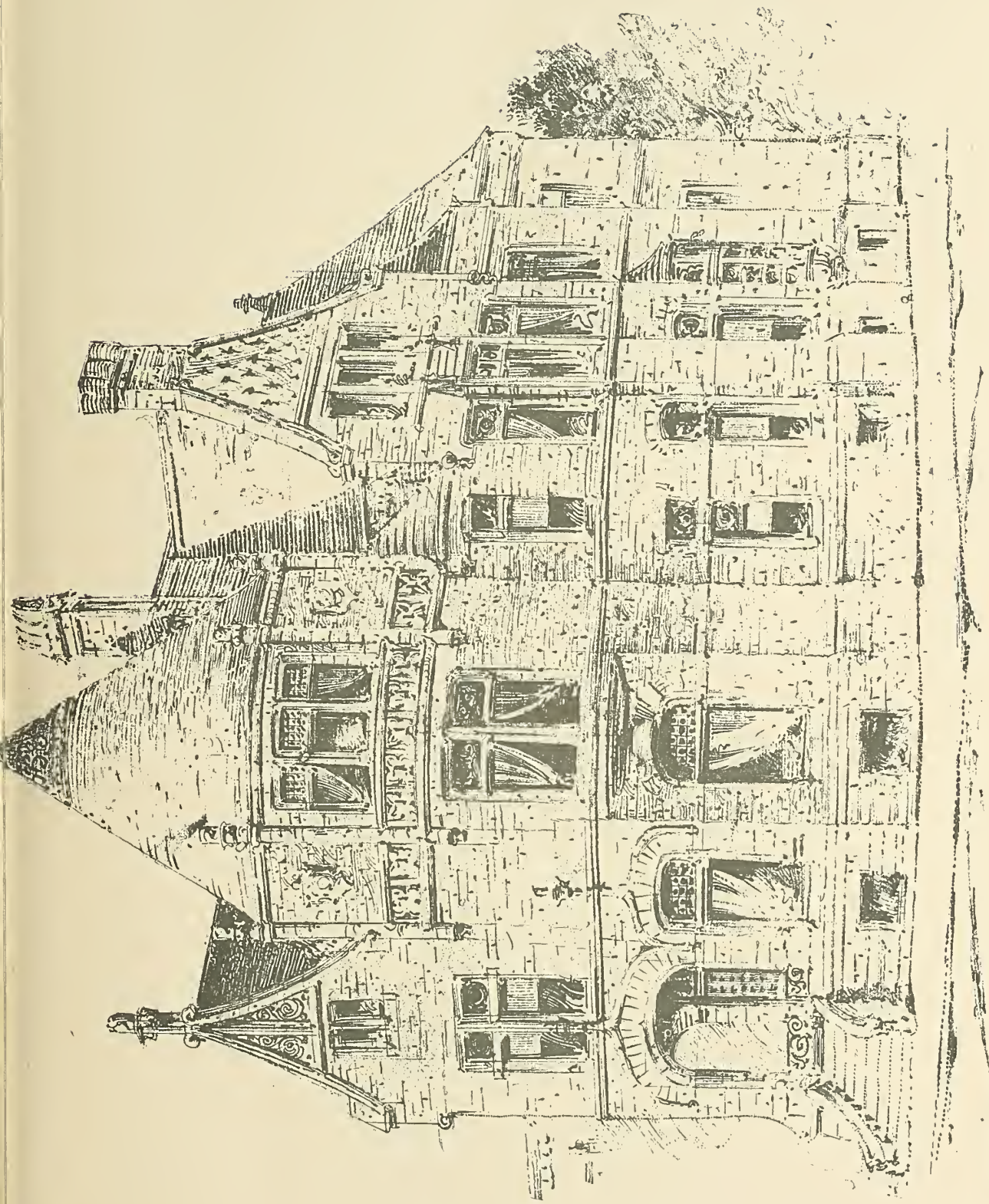
FOUR DWELLINGS, ON ELLIS AVENUE, CHICAGO, FOR W. S. WALKER.

PATTON & FISHER, ARCHITECTS.

Block of THREE WELLINGS^{on} LAFLEY STREET
for Jas D. Marshall Esq^{re}
Alfred Smith
Architect - (Chicago).



WELLINGS^{on} LAFLEY STREET
Jas D. Marshall Esq^{re}
12.86

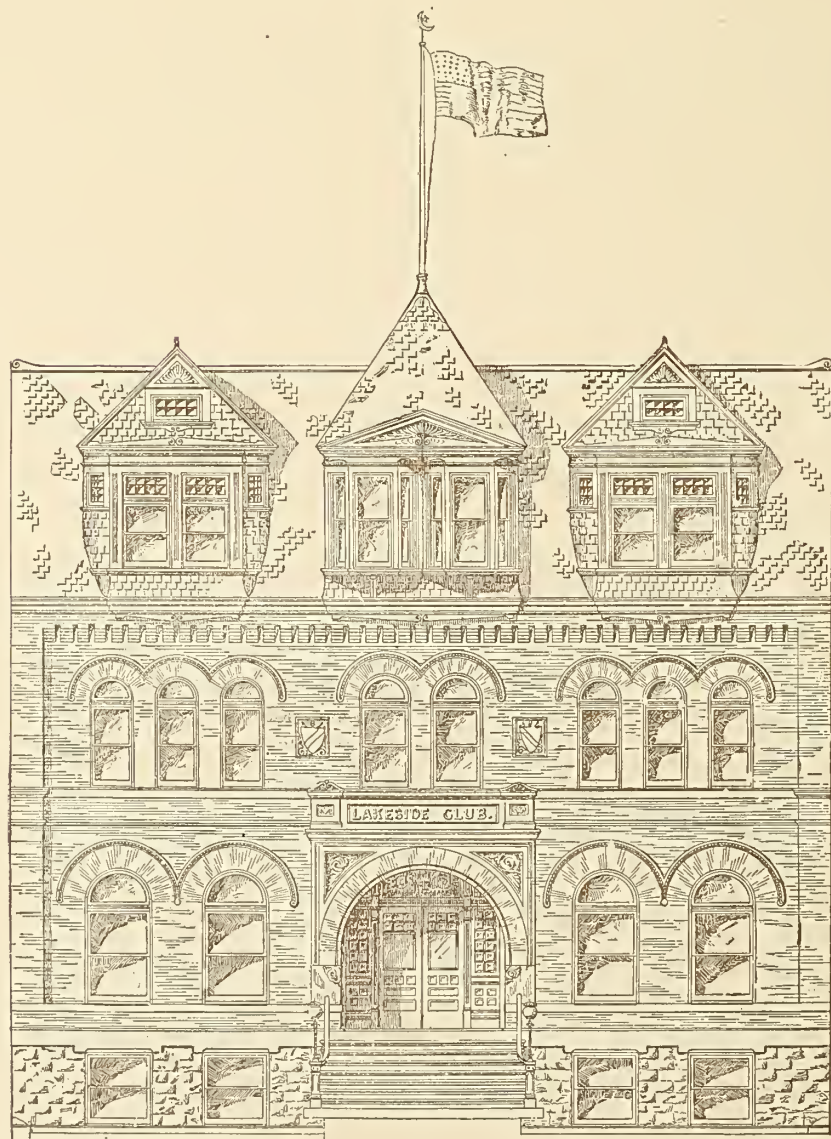
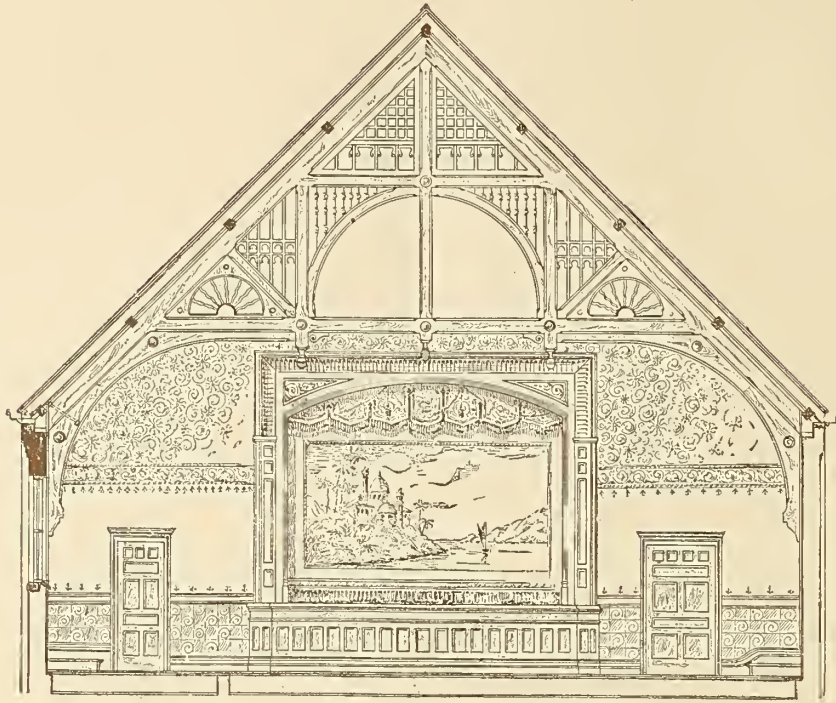


Reproduced from pencil drawing.

RESIDENCE FOR D. K. HILL, MICHIGAN AVENUE, CHICAGO.

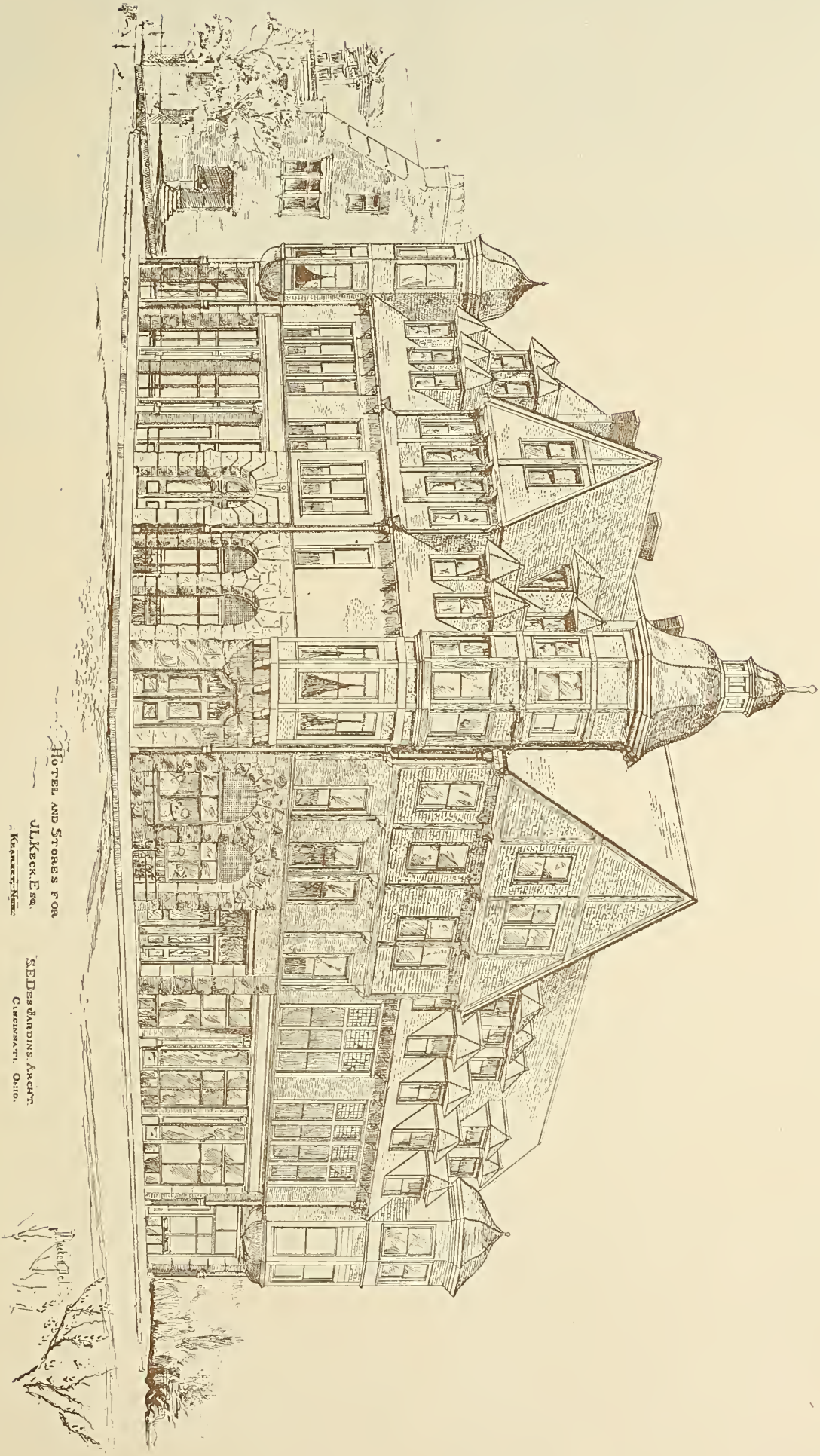
BURNHAM & ROOT, ARCHITECTS.





LAKESIDE CLUB HOUSE, CHICAGO.

L. B. DIXON, ARCHITECT.



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A MONTHLY JOURNAL (WITH AN INTERMEDIATE NEWS NUMBER AND A PHOTO-GRAVURE EDITION) DEVOTED TO WESTERN INTERESTS.

VOL. IX.

CHICAGO, MAY, 1887.

No. 7

INTERMEDIATE NEWS NUMBER,

DEVOTED TO

ASSOCIATION AND BUILDING NEWS.

PUBLISHED BY

THE INLAND PUBLISHING COMPANY,

CHICAGO, ILL.

CHICAGO is now attracting the attention of the entire country through its rebellion against the arbitrary rules of its trades unions among building employes. From year to year strikes have occurred whenever a trade union saw fit to make a demand which was not immediately granted, until not only the contractors, material dealers, architects and real estate dealers, but the general public, have rebelled and have said, "The walking delegate must go," and telegrams are being daily received from the builders' exchanges throughout the country indorsing the movement, and offering aid and encouragement. The basis of action adopted by the conference of building trades is absolutely fair and absolutely right as between man and man. It contains nothing but the principles of personal freedom embodied in the national constitution, the object being to place contractor and workman upon an equal plane, so that a perfect harmony will prevail. The principles recognize the unity of interest, and as its purpose is completely against all interference from any quarter in the dealings between the workman and his employer, it will be but natural that it should meet with opposition from the leaders of the unions, who have for so long marked out the course the workmen have blindly followed. That the workmen will gladly hail the emancipation it declares for them is not doubted.

AS leaders in the movement, one, Mr. Joseph Downey, president of the Master Masons' Association, has worked heroically for his association, and to his management is due much of its success thus far; another, and a mason builder, too, is Mr. George C. Prussing, a man of clear judgment, who has thrown himself into the work of emancipation, and to him the entire building public will owe much when men are again allowed to conduct their own business. We indorse

the basis of settlement decided on by the committee of conference entirely, and propose that work be resumed as speedily as is possible with that as a basis. If on trial it was found that the insistence upon signatures from the men was from any reason inoperative the basis could be maintained without change. But let every one of the sixteen bodies represented in the conference remember that success lies only in unity of action and they have that with them which seldom fails in a cause, because it is seldom wrong, that is, public sentiment. Never in the history of the building trades has this been so strong in favor of the employer of labor as now, perhaps because never has the cause of a strike been so far removed from the questions of wages and hours of work. We have perfect faith in the ultimate result, and believe that other cities are looking to the action taken by Chicago, so that they may follow in the work of emancipation, and that the presence of the executive officers of the National Association of Builders will give to the settlement a broad and comprehensive character. The Carpenters' and Builders' Association, the largest organization of builders in the city, have unanimously ratified the basis of settlement, and it should be immediately adopted by all the associations represented in the conference.

Builders' and Traders' Exchange.

REPRESENTATIVES of the various building trades held a large special meeting at the Builders' and Traders' Exchange on the 14th instant. The rooms were crowded to their full capacity, and there seemed to be great unanimity of opinion as to the best method of disposing of the labor troubles. Mr. Kimbell voiced the sentiment of the thousand or so business men and large employers, when he declared the walking delegate must be relegated to the dime museum.

Mr. George Tapper was chairman of the meeting, and after some discussion, the following preamble and resolutions, offered by George C. Prussing, were unanimously adopted:

The members of the Builders' and Traders' Exchange of Chicago, in special meeting assembled in their capacity as citizens and as employers of labor, believe the time ripe to protest against the arrogant interference of labor organizations with business, and the rights of man as guaranteed by the constitution of the United States. From year to year this evil of foreign importation has grown worse and worse, because the people, whose duty as citizens it is to uphold and enforce the laws, have not taken the time to oppose actively the aggressions and outrages committed in the name and by the instigation of the various labor organizations. We have seen this evil brought to and planted in our soil; we have allowed it to sprout and grow, and put forth new and stronger shoots every year, until now it is plain that it must either be stamped out by the active coöperation of all lawabiding citizens, or it will overwhelm and destroy our very form of government. The dividing line between the permissible and the objectionable, between right and wrong, should be clearly and unmistakably drawn, and the voice of the community should be heard with proper earnestness and determination saying to the ignorant as well as the vicious, "thus far shall you go, but go no farther." We believe that the large majority sin from ignorance. Others have seen the wrong exist and tolerated, and wrong-doers prosper, until their moral perceptions are dulled and blunted. Those who know better, whose opportunity and education is superior, have neglected their duty to their misled fellow-citizens full long enough. A crusade must be inaugurated, and should be participated in by each and all who love and desire the perpetuation of this government, founded in the words of the immortal Lincoln, "of the people, for the people, by the people." Let all unite and stand shoulder to shoulder in solid phalanx for the right, and frown down the spirit of anarchy now rampant, and ere long the rights of the individual shall again be respected, and this country shall again and in fact become the "home of the free."

WHEREAS, We recognize that the Master Masons' and Builders' Association has taken a proper stand in its opposition to the arbitrary dictates of organized labor, and that its battle is our battle, and in the belief that the more complete the cessation of all

building work during the present strike the shorter will be the interference with business; now, therefore, be it

Resolved, That we indorse the action of said Master Masons' Association and make its position our own, and will actively aid and assist it in and during this strike.

Resolved, That while we condemn and oppose improper action by trades unions, we still recognize that there are many opportunities for good in associations of workmen, and shall aid and assist them in all just and honorable purposes; that while upon fundamental principles it would be useless to confer or arbitrate, there are still many points upon which conference and arbitration are perfectly right and proper, and that upon such points it is a manifest duty to take advantage of the opportunities afforded by associations to confer together to the end that strikes, lockouts and other disturbances may be prevented.

Resolved, That this exchange do, and it does hereby, call upon all contractors and builders, be they members of this exchange or not, for cooperation and active assistance; it calls upon all architects, upon the owners of buildings in course of construction or about to be started, upon the press and pulpit, upon each and every citizen, and particularly upon all mechanics and laborers who believe that absolute personal independence of the individual to work or not to work, to employ or not to employ, is a fundamental principle which should never be questioned or assailed; that upon it depends the security of our whole social fabric and business prosperity, and that employer and workman should be equally interested in its defense and preservation.

Mr. Prussing, after reading the resolutions, was requested to state the position of the master masons and replied: It is no more walking delegate! (Cheers.) No more interference with the boy who wishes to learn a trade that he may earn an honest living. (Cheers.) But why ask for particulars? We ask that the wrongs and outrages perpetrated by the trades-unions be wiped out, and we ask every minister in his pulpit and every editor in his chair to aid us. If we present a solid and united front the victory will soon be won. And now let me say to you that the sin of omission you committed in allowing Maxwell Brothers to go to the wall must be paid for, and it is now time for you to meet the obligation. The spirit of anarchy is rampant and must be put down, or it will put you down.

On motion of Mr. Prussing, the preamble and resolutions were then read and adopted seriatim.

The following resolution was read by the secretary:

Resolved, That the different associations of building contractors be and hereby are requested to send committees of three to a general conference to be held at the Builders' and Traders' Exchange, Wednesday, May 18, at 10 o'clock A.M.

R. C. McLean offered an amendment, inviting the Illinois State Association of Architects and the Chicago real estate board to the conference Wednesday morning, which was also adopted.

Mr. C. B. Carter was called and made an appropriate speech, in which he said there were now thousands of boys, in age from 12 to 20, who, instead of serving as apprentices to some honest trade, were going about the streets, candidates for the jail and penitentiary. He had seen sons of men who had fought for the preservation of this country driven from their work by aliens who had been in the country, perhaps, but three months, and now essayed to dictate every regulation of the trades.

A telegram was read from the Master Builders' Association of Boston:

We are watching your course with great sympathy and interest. Individual liberty must be preserved at any cost. Signed, W. H. SAYWARD, Secretary.

This brought forth three cheers and a tiger,—and a voice called, "What's the matter with Sayward?" The answer, "He's all right," shook the building.

The meeting then adjourned.

A MEETING OF ARCHITECTS.

A meeting of the Executive Committees of the Illinois State Association of Architects, and the Chicago Chapter of the American Institute of Architects was called by Mr. Adler, on the 10th inst. There were present, S. A. Treat, L. H. Sullivan, Wm. Holabird, W. L. B. Jenney, C. L. Stiles and R. C. McLean. The building situation was discussed, and, on motion by Mr. Treat, it was decided to ask the presidents of the state association, the Western and the Chicago Chapter of the American Institute to call a meeting of Chicago members for the 14th inst.

A meeting of the architects of the city was held in response to the call, a large number of the members of the associations being present. D. Adler, the chairman, said that the meeting had been called for the purpose of getting an expression of opinion regarding the existing labor troubles in the building trade. The question of a Saturday pay day as demanded by the bricklayers is trivial, but if this shows to be a controversy between free and bonded labor, if it is to be determined whether every citizen who comes to our shores must pay tribute to a band of monopolists who seek to control the labor market, then it is a matter of interest to everyone. I hope the meeting of today will take strong action in favor of personal liberty.

A discussion in relation to the status of affairs brought out a fairly unanimous sentiment that the building masters had adopted a wise course in stopping all work.

R. C. McLean was requested to read the preamble and resolutions presented by the Master Masons' Association to the Builders' and Traders' Exchange, given above.

W. L. B. Jenney said that the contest had nothing to do with labor. It was a contest between the walking delegate and the employer of labor. These so-called grievances have become so trivial that to surrender is to give up all rights as citizens. It was his belief that a great anti-union movement had begun, and would spread to all the large cities of the country. To decide what attitude the architects would take he would present the following resolution:

Resolved, That the secretary be and he is hereby instructed to send to the Builders' and Traders' Exchange, through its president, the announcement of our sincere cooperation.

The motion was unanimously adopted.

R. C. McLean moved that a committee of three be appointed by the chair in response to the resolution of the Exchange.

D. H. Burnham said that if this be the juncture where personal freedom was abridged that it was time for a strong spirit to sustain the law. He believed the time would come when this would be necessary, but if this was not the time he did not want to see the force of the association needlessly expended. He had seen the effect the unions had upon the laboring men, and would like to see them liberated. Some said they were

in the unions against their will; that they were governed by a strong socialistic element. But their discontent was from other causes as well. The workmen of today, through the press and by observation, see how others lived and feel that they would like to live in luxury also, and blindly strive for it. In conclusion, he recommended that strong sides be taken and each should be influenced for right and justice.

W. W. Boyington said that the action of the bricklayers in demanding a Saturday pay day, was merely a stepping stone for a still more arbitrary move, and had that been granted there was little doubt but it would have encouraged them to go to greater lengths in their coercive methods. He was not against unions or associations when they were formed for the purpose of educating and elevating men, but when such unions undertook to dictate, it was time to call a halt, and announce to the discordant element in the trade, that employers had some rights which it was bound to maintain. He favored resistance to the union conducting this strike until its backbone was broken. Other speakers followed in the same strain.

Mr. F. Foltz said there was no doubt but that the time had come when something should be done, and everything done to stop present work, and assist in upholding the law, and abolish unions. He had spoken to a great many good, decent workingmen, and they thought this way, and every effort should be made to let the public see the danger. He indorsed the resolution.

E. Burling said he was in sympathy with the resolution.

R. C. McLean said that the question was one as broad as American liberty and had grown to be a matter of public interest. The architects were a factor, the masons, the carpenters, the bricklayers were factors, but only factors. An unsettled condition of building interests recurring every spring had shown a disease; as had been pointed out the cause was found in the "walking delegate." The remedy, pronounced by all from the investor in realty even down to many members of the trades unions, was that the "walking delegate" should go and the rights of men under the constitution established. That half measures would not do. There must be a concerted action.

N. S. Patton asked if after the haymarket experience it was wise to wait till not only policemen, but citizens, had fallen, through those who held liberty to mean license.

J. W. Root spoke in favor of being conservative in action, but indorsed the resolution.

After some further discussion it was finally decided by a narrow majority not to send a committee to the conference.

THE CHICAGO REAL ESTATE BOARD.

A well-attended meeting was held and considered the present crisis in the building trades. The address from the Builders' and Traders' Exchange was read, and H. L. Turner moved that a committee of three be appointed. He was in hearty accord with the movement now on foot. There was but little speculation in the real estate market. Their principal business was the erection of houses, and they were directly interested with the master masons. Late estimates demonstrated that the prevalence of labor troubles had increased the cost of construction from ten to twenty per cent. He was employing carpenters who were working with revolvers in their pockets for fear of the union men. Such a state of affairs should not be allowed to continue, and the board should take decided ground in this matter.

Mr. N. L. Barnard said that he would not go through the experiences of the last few months again for \$1,000.

Mr. Bryan Lathrop said that investors are being deterred from erecting large buildings. The board should place itself squarely on record in this matter. He represented several large eastern capitalists who had instructed him to stop all work pending a settlement, even if it took a year.

"I am ready," said Mr. Turner, "to take the position that not a stroke of work shall be done until people can manage their own affairs. Sooner than relinquish that right I will retire from business." The following was adopted as the sense of the board:

Resolved, That the Real Estate Board is in full sympathy with the Builders' and Traders' Exchange, the contractors, architects and owners, in their effort to check the evils of the labor troubles, and that the Real Estate Board expresses a willingness to cooperate with them in their effort to devise such means as will result in an equitable and final settlement of the question.

The chairman appointed H. L. Turner, W. L. Pierce and E. S. Dreyer as a committee to represent the board in the conference of associations.

COMMITTEE OF CONFERENCE.

At the meeting of the Committee of Conference called by the Builders' and Traders' Exchange, George Tapper was made chairman, and F. C. Schoenthaler secretary. Delegations were present from different organizations as follows:

Architectural Ironwork.—Robert Vierling, A. Vanderkloof, M. Benner.
Plumbers.—Robert Griffith, William Sims, J. J. Wade.
Steamfitters.—H. J. Savage, L. H. Prentice, P. S. Hudson.
Stonecutters.—F. V. Gindell, T. C. Diener, John Rawle.
Plasterers.—J. N. Glover, A. Zander, John Sutton.
Roofers.—M. W. Powell.
Master Masons.—George C. Prussing, George Tapper, George H. Fox.
Painters.—J. B. Sullivan, H. J. Milligan, J. G. McCarthy.
Galvanized Ironwork.—Edward Kirk, Jr., F. A. E. Wolcott, W. B. Maypole.
Carpenters.—William Hearson, William Mavor, W. T. Waddell.
North Side Brick Manufacturers.—A. J. Weckler, F. Zapell, A. Hahne.
Non-Side Stonecutters.—C. B. Kimbell.
Real Estate Board.—Henry L. Turner, W. L. Pierce, E. S. Dreyer.
Builders' and Traders' Exchange.—F. E. Spooner, H. C. Hoyt, B. J. Moore.
Hollow Tile Manufacturers.—P. B. Wight.
Architects F. Baumann, J. W. Root and O. J. Pierce were present in an individual capacity.

George C. Prussing read the platform of the master masons, which was adopted at the meeting on the 17th instant, and said it was the position of the Master Masons' Association.

On motion of Mr. F. E. Spooner, the two sections of the platform of the master masons which were taken from the declaration of principles of the National Association of Builders, were read and adopted without a dissenting voice. They are as follows:

1. This association affirms that absolute personal independence of the individual to work or not to work, to employ or not to employ, is a fundamental principle which should never be questioned or assailed; that upon it depends the security of our whole social fabric and business prosperity, and that employers and workmen should be equally interested in its defense and preservation.

2. While upholding this principle as an essential safeguard for all concerned, this association would appeal to employers in the building trades to recognize that there are many opportunities for good in associations of workmen, and while condemning and opposing improper action upon their part, they should aid and assist them in all just and honorable purposes; that, while, upon fundamental principles, it would be useless to confer or arbitrate, still there are many points upon which conferences and arbitration are perfectly right and proper, and upon such points it is a manifest duty to take advantage of the opportunities afforded by associations to confer together to the end that strikes, lockouts, and other disturbances may be prevented.

On motion of P. B. Wight, the association went into a committee of the whole to allow general discussion, Mr. Ed. Kirk, Jr., taking the chair.

Each association was requested to state the situation in which they were placed. Statements were made by representatives of various trades represented, all showing that there was constant apprehension in all building lines, and a disturbed condition existing in every branch which it would require united action of all to cure. The belief generally prevailed that no individual trade could accomplish anything permanent, as their interests were so intermingled that if one was settled another was complicated, and united action was the only way to secure relief. They thought the time had come when employers of all kinds should be permitted to have a voice in the running of their own business, without interference from a third party called a "walking delegate." They were all seeking emancipation from what they termed a species of tyranny, and wanted for a little time to say their souls were their own.

The committee of the whole rose, and Mr. Tapper resumed the chair.

Mr. Prussing suggested that the following should be adopted at some time by the conference committee:

We, the representatives of the various building trades, in general conference assembled, recommend to the bodies by us represented the adoption of a rule requesting each man employed to subscribe his name to the declaration of principles indorsed by us.

The sentiment was applauded.

On motion of Mr. Prussing, the chair appointed the following committee to prepare and submit to the meeting a plan for future action: George C. Prussing, Henry L. Turner, William Hearson, J. B. Sullivan and Edward Kirk, Jr.

The conference then passed a resolution to adjourn from day to day until the question of labor was settled and disposed of, and adjourned.

THE BASIS UPON WHICH WORK MAY BE RESUMED.

The committee of conference met in the Chicago Real Estate Board rooms, on the 19th instant, George Tapper chairman, F. C. Schoenthaler secretary. The meeting was called to order, and after the secretary had read the minutes of the previous meeting, he read the following telegrams:

The following was received from Cincinnati by George Tapper, president of the Builders' and Traders' Exchange:

Our exchange just passed strong resolutions, heartily commending your action and guaranteeing practical support. Stand by your colors.

JAMES H. FINNEGAN.
President of Cincinnati Builders' Exchange.

The following dispatch, dated Boston, was also received by President Tapper:

The executive board of the National Association of Builders, to Builders' and Traders' Exchange, Chicago, greeting: We have carefully examined the position you have taken, and the conditions which have led to your action, and hereby extend to you our most hearty approval and indorsement. Your position is entirely in accord with the principles of the National Association. Opportunity should always be given for an amicable settlement of differences that come within the rightful province of associations on either side; but when the line of right and justice is crossed, the prerogatives of employers disregarded, and attempts made to coerce and force them from the exercise of their rights in the conduct of their business, then all lovers of law and order, all believers in individual liberty, will stand together with unbroken ranks until the recognition of this fundamental principle is thoroughly acknowledged.

J. MILTON BLAIR, President.
W. H. SAYWARD, Secretary.

A few minutes later the following was received:

The Master Builders' Association, of Boston, in convention assembled, have unanimously adopted the following resolutions, and have ordered the same sent to the Builders' and Traders' Exchange, of Chicago, as follows:

While we acknowledge that, in Boston, the situation is, fortunately, harmonious between the employers and employes in the building trades, owing to the fact that reason has prevailed, the proper rights of the workmen having been recognized by the employers, and the distinctive rights of the employers so recognized by the workmen, and as a result thereof no organized attempt has been made in this city to overstep the bounds of proper jurisdiction by either party. We cannot ignore the fact that our brother builders in the city of Chicago have had forced upon them a problem which can only be solved by a firm denial of the assumed right of voluntary associations to disregard the rights of others, trample upon individual liberty, and blockade the progress of business thereby. We, therefore, hereby approve of the course taken by the Builders' and Traders' Exchange of Chicago, and assure them of our constant support in that line. Let the principles for which we are all fighting be clearly defined, then stand. We are with you in behalf of right and justice for all, and for the untrammelled liberty of every American citizen.

WILLIAM H. SAYWARD,
Secretary Master Builders' Association.

The committee consisting of George C. Prussing (master mason), H. L. Turner (real estate), William Hearson (carpenter), J. B. Sullivan (painter), and Edward Kirk, Jr. (galvanized iron), appointed at the meeting on Wednesday to formulate a plan of action, submitted the following report:

To the representatives of building interests in conference assembled:

GENTLEMEN,—In order to carry into effect the platform adopted by us, your committee recommend:

First. That from this time forth the signature of the following card of principles by the employé be made a universal condition of employment by all building interests of Chicago, viz:

I recognize the right of every man to decide for himself, without dictation or interference, when he shall work or cease to work, where he shall work, for whom he shall work, how many hours he shall work, and for what wages he shall work.

I recognize the absolute right of the employer to decide for himself, without interference from any source, whom he shall employ or cease to employ; to regulate and manage his business with perfect independence and freedom, provided only that he deal lawfully, justly and honorably with all men.

I recognize the right of every father to have his son taught, and of every son to learn any lawful trade as on a plane with his right to a knowledge of reading, writing, or any other branch of learning, and should be subject to regulation only by the laws of the land.

I hereby pledge myself, in all my relations and intercourse with my employers and fellow workmen, to maintain and live up to these principles.

Your committee recommend:

Second. That the same card of principles be presented for signature to every employer with the pledge thereto changed as follows:

I hereby pledge myself to maintain and live up to these principles in the prosecution of my business, and to lend my aid to the full extent of my influence and power for their maintenance and protection among my fellow employers. I further pledge myself not to employ any workman except upon his signature to this card of principles.

Your committee recommend:

Third. That this conference recommend to our respective organizations to request each of its members to employ such workmen only who recognize the inalienable rights as above set forth, and evidence their position by subscribing their names thereto.

Your committee recommend:

Fourth. That public announcement be made at once that business will be resumed on or before June 1, 1887, with this card of principles as a basis.

Your committee recommend:

Fifth. That a standing committee of one member from each of the building trades, the Chicago Real Estate Board and the Illinois State Association of Architects, to be known as the Central Council of the Building Interests of Chicago be appointed, whose duty it shall be to see to the carrying out of these principles; that it shall have a sub-committee of safety, whose province it shall be to see that ample protection to all is afforded; with sub-committees on grievances, strikes, arbitrations, and such as may be found necessary, but that it work always and solely for the maintenance and protection of the principles herein laid down.

Your committee recommend:

Sixth. That an address to the workmen of the building trades and to the general public, be prepared, setting forth your action and your reasons therefor; that 50,000 copies be printed and immediately distributed.

Your committee recommend:

Seventh. That the declaration of principles be printed at once and circulated for signatures.

Your committee recommend:

Eighth. That a fund be created to defray expenses of this Central Council, and that we request each association here represented to transmit to the order of Geo. Tapper, chairman, the sum of twenty-five cents for each of their members, and that individual contributions of people interested in this work be accepted.

On motion of Mr. Turner the report was taken up by sections and considered.

After some further discussion, the platform was unanimously adopted, and each member of the committee was instructed to present the report to their association for ratification.

The committee of five were reappointed to take charge of the preparation of an address to the workmen and general public, and the printing, after which the meeting adjourned to meet from day to day until the labor troubles are settled.

SETTLEMENT OF THE CARPENTERS' STRIKE AT LOUISVILLE, KENTUCKY.

The carpenters' union ordered a general strike on May 1, and between 400 and 500 members of the union quit work. They demanded an increase of twenty-five cents a day for all men receiving less than \$2.75, but the master carpenters refused to grant the request.

The differences between the builders' exchange and the carpenters' union was adjusted on the 18th inst. The demand of the latter for an increase of twenty-five cents per day for all classes of carpenters being refused by the exchange. The prices paid heretofore were \$2.25, \$2.50, \$2.75. After several consultations it was agreed that it should be left with the master builders to increase the wages of such men as were found to be worthy of an increase. Thus most of the second-class men receive first-class wages, while inferior workmen either had to quit work or be satisfied with what wages they had previously worked for. In most every instance the men are satisfied, and the members of the exchange did not hesitate in raising the pay of good men rather than lose their services. Everything is running smoothly again and there are very few idle carpenters.

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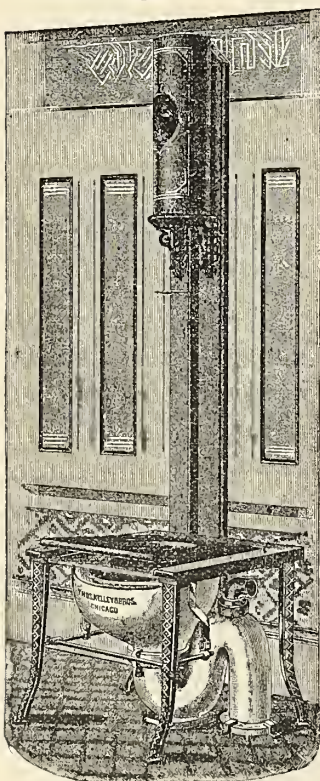
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COMPETITIONS.

TO ARCHITECTS.

The Board of City Hall Trustees of Cincinnati invite competition in designs for a new city hall; all designs to be submitted on or before July 15, 1887.

A plat of the ground to be occupied, and all other necessary information, will be furnished to architects desiring to compete upon application to the board.

ROBERT ALLISON, President.

NOTICE TO ARCHITECTS.

PLANS FOR COURT HOUSE.

The Board of Commissioners of Vanderburg county, Indiana, will receive competitive plans for a new court house for said county, at Evansville, Indiana. Architects competing will deposit their plans with the Auditor of said county, on or before the 15th day of June, 1887, at 4 o'clock, P.M.

The cost of the building completed must not exceed four hundred thousand dollars (\$400,000) and must be constructed strictly fireproof throughout the entire structure. Said court house is to be located upon a lot of ground 300 by 300 feet square, and to have four fronts, with grand entrance fronting the streets bounding said lot or court house square. Said plans must be of a uniform method of presentation, drawn to a uniform scale of one-eighth ($\frac{1}{8}$) of an inch to the foot, put up in portfolio form. Said drawings must be free from all coloring, and done only in black lines and pen shading. Each design shall consist of plans of foundations, each floor, roof, plan, transverse and longitudinal sections through the building. Elevations of the four fronts of said building with such details as will be necessary to clearly develop the principal parts of construction. Each design shall bear only the motto of the author. No plans will be considered which do not conform to these requirements.

The Board of Commissioners will pay to the architects of the three best plans the following sums, to wit: For No. 1, the sum of \$500; for No. 2, the sum of \$300; and for No. 3, the sum of \$200; the said pre-empted plans to become the property of the county upon the payment of said premiums, with the right to use the whole, or any part, or any modification thereof, without further claim from the authors for compensation or employment.

Carefully prepared detailed estimates of the cost of erecting and finishing the building will be required to accompany each plan submitted.

The Board of Commissioners reserve the right to reject any and all plans submitted.

By order of the Board of Commissioners.

JAS D. PARVIN,
Auditor Vanderburg County.

PROPOSALS.

ALTERATIONS.

[At West Point, N. Y.]

DEPOT QUARTERMASTER'S OFFICE,
HOUSTON STREET, CORNER GREENE,
NEW YORK CITY, April 26, 1887.

Sealed proposals in triplicate are invited, and will be received at this office, until 11 A. M., June 9, 1887, for the mason and iron work, plastering, etc., called for by specifications numbered 1, and for the carpenter's work, painting, etc., called for by specifications numbered 2. The work is required in altering the Academic Building at West Point, N. Y., for which the plans and specifications may be seen at this office, and at the Post Quartermaster's office at West Point, N. Y., where also the blank forms for proposals, contracts, etc., can be obtained. Bidders must state the time within which the work will be completed. Bids must be for all the work, materials, etc., on either of the specifications, or on both. Proposals must be made in strict conformity with the plans and specifications, and must be accompanied by a guarantee bond, having justification for 20 per cent of the amount of the proposal, and a bond, with a penalty of 10 per cent will be required upon execution of the contract. The government reserves the right to reject any or all proposals.

Envelopes containing proposals should be addressed to the undersigned, and marked proposals for "Altering the Academic Building at West Point, N. Y."

HENRY C. HODGES,
Lieut.-Col. and Dep'y Quartermaster General, U.S.A.,
Depot Quartermaster.

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JUNE, 1887.

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IN explanation to those of our readers who may wonder why so much space is given to the discussion of different phases of unions versus contractors (they do not live in Chicago certainly), we will call attention to the record of the important moves made by those actively interested, since our last issue, and especially to the report of the Executive Committee of the National Association of Builders, and their recommendations, published elsewhere. The causes which led up to this complete stoppage of all building in Chicago are easily enumerated. For several years contractors have been saying there is no money in the business, and those who invested money in building that, not knowing when a strike would upset all calculations, building was becoming more unsafe as an investment year by year. A strike of carpenters almost precipitated the present condition of things in April, but as it occurred at the close of the winter work, and before the mass of spring building had commenced, this, through these circumstances and the firm stand taken by the Carpenters and Builders' Association, was averted. Later, it only required a demand for a Saturday pay day by the bricklayers and stone-masons' union, and, upon its refusal by master masons, a strike, to cause all interested, from the owner and his adviser, the architect, to the smallest contractor and material dealer, to say "we will stop right here until we can manage our own business," and thus know upon what basis to calculate, and arrive with some accuracy at a reasonable percentage of profit.

WHEN the individual workman said, "I will not work except under certain conditions," he exercised his lawful right. When he formed in association and said, "We will all act in concert in the same way," he was still within the law; but when he went farther, and said, in effect, that all work belonged to his association or union, and that none who were not members thereof should labor within the district which that union assumed to control, then the rights of man, as established by the constitution of a free country for a free people, was violated. But they could not even stop here. The union assumed the right to appoint itself judge, jury and executioner, and delegated this authority to one member, the "walking delegate." True, they assumed a sort of "rebate" court procedure, what the Scotch called "Jedwood justice," when they hanged a man and tried him afterward; they reserved the right to pass upon, to recall or indorse, the acts of the walking delegate at the next meeting of the union. Such arbitrary action is not excusable, even if the reasons given by the unions were correct, "that the law is beyond the reach of a poor man, and he cannot afford to waste days in attendance upon court to collect wages from a contractor who does not pay his debts." It is only in the most barbarous districts of any country that "lynch law" is ever even assumed to be right.

A CAREFUL investigation of the condition, the causes and the results of the present disturbance, made by constant personal attendance upon the meetings of contractors, and conversations with workmen, both members of unions and others, leads to but one conclusion. The labor unions are controlled by two elements. Largely in the majority are the professional labor agitators, from the professional "Knight of Labor" with political aspirations, to the socialistic crank who preaches that it would materially better the condition of all if the "railroads were divided among the

people and each given a tie." In the minority yet still existing among the leaders are those who believe that capital, as they hold the contractor to represent, and labor are of necessity eternally at war, and that to yield is to become slaves to despotic tyrants. The followers of both these classes of leaders are, strange to say, comparatively small. The mass of the conservative and competent workmen, feeling that it is easier to work peaceably, and pay a tribute to a union for such privilege, joins, and pays his initiation fee and dues, and works. In the evening he goes home to his family, and, when called off the work by a walking delegate, he submits, rebelling in his heart, but feeling that the union is too strong for him to oppose. These statements are not overdrawn, but go to show that for the honest workman, as well as every American citizen who holds the institutions of his country dear, there is but one way to work in this great movement of emancipation.

THE differences between the master masons of Chicago and the bricklayers' union, while involving questions of principle not assented to by the union, as a body, seem to be held by the large majority as being just and right. Were there no other obstacle in the way it seems possible that the masons' part of the present difficulty might be adjusted. But the real separation seems to be the utter distrust each body has of the other. Master masons speak of former contracts made by arbitration committees having been broken when reported to the union, and the union make charges of bad faith in former dealings with the masons, both as an association and as individuals. It is evident that in the past, individual master masons have taken advantage of the unorganized condition of the workman, and treated him unjustly, and the workman has retaliated when he found he had the power, by instituting the walking delegate. Both sides have suffered by this strife thus engendered, and now it is almost impossible to eradicate from the minds of either contractor or workman the idea that each is in opposition to the other. It is hoped, and we think that both are fast learning, that the present strike, or lockout (one of the peculiarities is that the contractors claim it to be the former and the workmen the latter) is teaching that while this condition continues there can never be a permanent settlement.

IN all other trades the situation is much the same; the workmen feel that their unions are necessary to their existence, and the contractors that they must "down the union." The unions do not see that it is the objectionable and arbitrary features of their unions that must be eradicated and not the abolition of the union itself. The contractors, as the supposed more intelligent body, should have all the patience and wisdom possible under the circumstances. They should labor as individuals to get the workmen to see not only where they are wrong, but to assure them that they can be trusted to treat them fairly. If these clauses which cause the disturbance and continual disposition to strike or to lockout should be eliminated, then the two bodies could meet and talk over the situation, looking from the same standpoint with equal interest and equal fairness. The conclusions reached would certainly be for mutual benefit, and the entire effect would be what must be before any permanent settlement can be reached, as the voice of one association. While the interests of each are equal there is no reason why there should be two associations acting independently. Because there are many matters that come before contractors or workmen that are of no interest to the other, there may be two associations, still, in everything effecting a mutual interest, such as hours of work, wages, etc.; nothing

should be done until the entire matter had been reviewed and decided upon by a joint committee.

ONE of the more important subjects discussed during the present labor troubles is the apprentice question. The unions say that, in absence of a law, they have been compelled to establish a rule governing apprentices. The contractors claim, as a part of a universal principle, that the boy's right to learn a trade is on a plane with his right to a school education. The state law on the subject of apprentices, revised and in force since July 1, 1874, places the age under which apprentices may be bound at sixteen years, by the natural guardians of the minor, with or without his consent, through indentures subscribed to by both parties. When the indentures are drawn by guardians other than parents, a copy shall be filed in the county court. In all indentures the master shall cause the apprentice to be taught to read, write, and the ground rules of arithmetic. All money to be paid the apprentice as compensation for services shall be inserted in the indenture and secured to the sole use and benefit of the minor, and at the expiration of the term of service, when the term of indenture is over one year, he shall be given a new bible, two suits of clothes, and \$20 in money. To remove an apprentice from the state, a bond of \$1,000 shall be filed in the county court. Another clause, which may have an important bearing where outside parties interfere with apprentices at work, is that any person who shall counsel, persuade or entice an apprentice to absent himself from the service of his master, shall forfeit and pay not less than \$20 or more than \$500, to be sued for with costs in any court of competent jurisdiction. These are the principal points in the apprenticeship law for the state of Illinois, which seems wholly inadequate to cover present requirements, and leaves the question, in the majority of trades, wholly in the hands of the contractor, and those who wish to learn trades to settle between themselves. The journeyman has nothing whatever to do with the question in any case, and the assumption of authority in the matter by trades unions is as entirely unwarranted as their interference with the employment of non-union workmen.

CARPENTERS throughout this country, as a body, are the most intelligent of the building trades, and it is strange that a professional agitator, such as recently spoke in Chicago, can even obtain a hearing upon matters in which they alone are interested. At this meeting the speaker, a man named P. J. McGuire, is reported by the press as saying that "he came to Chicago to throw down the gauntlet to the master builders." "Milton Seward [a strange mixture of the names of J. Milton Blair, president, and W. H. Sayward, secretary of the National Association of Builders], George C. Prussing, and other leaders in the Carpenters and Builders' Association, were attempting to stamp out the carpenters' organization." "That work in Chicago has to be done, it cannot be shipped away for completion, and carpenters here will see that no one else comes here to do it," and much more in the same strain, but enough is quoted to comment upon. These will show how unreliable the average statements of such men are, how unsafe it is to follow their leading, and how so large a majority of the labor troubles, and consequent loss of work, is chargeable to just such agitators. He "throws down the gauntlet," and leaves the carpenter with a wife and children to support to fight it out, showing how unsafe an adviser he is to follow. The gentlemen named have nothing directly to do with the Carpenters and Builders' Association of Chicago, all three being mason builders, and have directed

no movement, or even spoken against carpenters' unions especially, showing the unreliability of his statements. His latter statement belongs to the creed of the anarchist, and is contrary to every principle of justice and freedom.

A NEW method for supporting walls has been inaugurated by Architect Frederick Baumann, of Chicago. It became necessary to take out the first story of a dividing wall in a double store building, supporting the wall with iron beams, the ends resting upon iron columns. Instead of using screws and needles, as is usual in such cases, the architect conceived the idea of removing the wall from the line of the ceiling to a little below the floor line, for a distance of one hundred and twenty-six feet, in nine equal spans, and inserting the columns without any temporary support. This was done by first cutting through the wall where the column was to be set; then a firm foundation was secured through placing a curved castiron bearing plate in the wall below. Upon this were placed two footing plates, with steel wedges between. The column was then placed on the footing plates, and a stone cap placed upon the column and the space between this and the wall above filled with brick, set in Portland cement. After allowing this to stand for a day, the steel wedges were driven up until the column formed a substantial support. After all the columns were set in this way, the iron I-beams upon which the wall was to rest were introduced. This was done by cutting half through the wall on one side, placing the beams, and then placing those on the opposite side in the same manner. The work was perfectly successful, and no settlement of any kind occurred, though each column supports a weight of over one hundred and ten tons. It was observed, however, that the utmost care and the constant watchfulness of the architect were necessary, as the entire operation was a delicate one from an engineering standpoint, the slightest neglect or mistake, especially in keying, being liable to lead to serious results. Mr. Baumann's method will doubtless be followed generally where the same work is to be accomplished, namely, the substitution of columns for the lower part of a dividing or outside wall. From this demonstration it would seem that the plan may be adopted for buildings of almost any height, at a great saving in time and cost.

THE National Association of Plumbers will hold its fourth annual convention in Chicago, June 21, 22 and 23. The assembly will convene at the Grand Pacific Hotel. About 160 delegates from all the states and territories will be in attendance. The convention will not only be the most important yet held by the plumbers, but will discuss questions of general interest to all building trades. Papers will be read upon payment by the hour, the apprenticeship question, state legislation, manual training and trade schools and other questions of general interest, while such topics as main drains, foot vents, etc., will be technically discoursed upon. A new system will be inaugurated in their discussion, it being arranged to debate each paper after it is read before continuing. An entertainment committee of twenty-five has been appointed, whose duty it will be to look after the comfort and amusement of the delegates out of convention hours.

ARCHITECT Willoughby J. Edbrooke, of Chicago, has been appointed Superintendent of Buildings, vice Alexander Kirkland. Mr. Edbrooke is a member of the Western Association, and also the Illinois State Association, and it is complimentary to the profession, as well as greatly to the advantage of Chicago, to have an architect of his ability at the head of the building department.

The Education of the Architect.

BY PROF. N. CLIFFORD RICKER, OF THE UNIVERSITY OF ILLINOIS.

A SESSION of the English Conference of Architects, on May 7 last, was devoted to the "Education of the Architect," with results possessing great interest to American architects, since the papers read may be taken as expressing English views on that topic.

The discussion was preceded by some remarks of the chairman, Mr. Arthur Cates, who said that very little had yet been done in England toward establishing a course of instruction as a basis for the professional education of the architect, the examinations now required for admission to the R. I. B. A. merely indicating the proper course of study, and showing the prevailing deficiency of accurate scientific knowledge now found in candidates. Each pupil was therefore likely to neglect the preliminary studies, devoting himself to one or more kinds of advanced work. Much more had been accomplished in this respect by the American architectural schools.

The first paper was read by Prof. Babcock, of Cornell University, who believed that a technical education was essential to architects, and should comprise those principles of building and mechanics required in designing structures, as well as the general sciences, the history of architecture, with drawing and designing. Manual training in the use of the tools and processes of the building trades is useless to the architect, not being necessary to the proper designing or supervision of such work, and would be solely valuable as a physical exercise. The necessary knowledge of constructive details should be acquired from suitable lectures and text-books, supplemented by visits to work in process of construction. The architect is not required to become a skilled mechanic in any branch.

The mechanics of architecture may be made quite simple, dealing only with statics, omitting all other branches, which are only required by the engineer. The formula of resistance of materials may be simply expressed, requiring only a knowledge of arithmetic and algebra, and are of very easy application. All higher mathematics may be omitted if the student be willing to accept the results of the work of other men, not caring to examine the methods by which they were obtained. "It is best, of course, that a student should understand the theories of things, but it is not necessary." The graphical method of finding strains in beams and trusses, and lines of pressure in piers and arches, has practically superseded the analytical, being simple and easily applied.

Physics, chemistry, botany, geology and mineralogy are the general sciences to be studied.

No suitable history of architecture yet exists, Fergusson's containing valuable examples, but being badly arranged, unsatisfactory, and full of his theories and criticisms. The structural details and constructive methods of the styles should be studied, especially of the Romanesque period from 400 to 1200 A. D., which is unfortunately neglected in all histories, though it is the period of the greatest architectural invention. This study is best taught by carefully arranged lectures, omitting everything irrelevant, illustrated by photographs, drawings, lantern slides, and models of details. These models cannot be purchased, must be specially constructed, but are far more valuable than drawings.

Accuracy and clearness in drawing are essential, a thorough knowledge of descriptive geometry being a pre-requisite for this. Painting in water colors should be taught, but not required, few students becoming experts in this. The best draftsmen do not make the best designers.

Designing is often considered to be a special gift, but the average student can be taught its elements, so as to develop his latent powers, though some may become designers without training in a school, while others will fail under any circumstances.

Time can only be spared for a year each of French or German, or two years of either, but Greek and Latin would be better, because supplying the terminology of architecture. French is preferable to German, so that a student may be able to read the best architectural work ever written, Viollet-Leduc's "Dictionnaire raisonné," not yet translated into English.

Graduates from the full courses of the American architectural schools obtain ready employment and rapid promotion, learn quickly in an office, and after two or three years of office work are well prepared to commence practice.

The second paper was read by Mr. E. C. Robins, who said that the examinations in architecture had shown the necessity for a better general and technical education, especially to prevent the architect from being supplanted by specialists, such as sanitary engineers, etc., and to accord with the extraordinary progress now made everywhere in the teaching of applied science. The general knowledge possessed by the average pupil in an architect's office is insufficient. An architect must be an artist as well as a scientific man; but if the artistic be too exclusively cultivated in early life, he acquires a distaste for the scientific, which should therefore be first studied as a basis for the former. The number of architects should not be

increased, but their quality ought to be improved by better systems of apprenticeship and instruction. At present, a course in science for a year at a technical college, succeeded by an apprenticeship of from three to five years, is all that can be done. The programme of studies for this year would practically be similar to that of the first year in the American schools of architecture, comprising mathematics, except calculus, art and drawing, physics and chemistry, with laboratory practice, and French or German. During his apprenticeship the student should supplement and complete this course of study by attending evening lectures, art classes, etc., so as to practically complete the course of study prescribed in America, which would well prepare the student for the examinations.

Mr. Arthur Hill read a paper on the "College Training of Architects," comparing the differences in the present modes of educating architects and physicians in England, showing the necessity for the provision of suitable collegiate training, not yet existing in England, the required studies now being pursued in different places. This course in architecture might easily be added in colleges now having a course in civil engineering, just as is the case with American architectural schools, and with the great advantage that ancient monuments are much more readily accessible in England for purposes of study. This training would soon materially elevate the standard of the examinations and of the profession, and would also impress the public with a sense of the value of proper training. Raw pupils would soon be required to pursue this course before admission to an office, to the advantage of the architect.

A general board of professional education was then suggested, to represent the institute, and take charge of the movement, arranging with several existing colleges for the establishment of proper courses in architecture.

A valuable paper by Professor Aitchison followed. He says that it is now most essential to make the public appreciate and demand good architecture, to see that architects are adequately remunerated, and to aid the progress of architecture, this comprising the education of the future architect. Every architect must construct soundly, or is otherwise no architect at all. It is a great advantage to be able to use the higher mathematics, otherwise he must take theory on trust, or employ some one else to solve difficult problems. Descriptive geometry is essential in construction, and geometry was the foundation of most good architecture. He must be able to solve the statical problems occurring in building, as well as possess a thorough knowledge of materials used. Also drawing, planning, lighting, heating and ventilation, with some knowledge of architectural law.

"It is a thousand to one against any student having any architectural invention, and as far as I know, invention cannot be taught," so we must provide instruction valuable to all. Designing should be taught by first studying the Greek, Byzantine, Saracenic and Gothic styles, then taking a purely structural building and trying to make it beautiful. "Eccentric ugliness is better than second-hand beauty, if it be the right step forward." Systematic instruction saves time, is more thorough and complete than self-instruction, but must be imparted by live men, not pedants. There is wanted in the architecture of this century "more original and daring construction, more invention, more perfect subordination of parts, and greater finish."

Professor T. R. Smith read a paper on an "Architectural Studio," suggesting that an office should be opened by one or more architects, provided with a good library and collection of casts, receiving students daily under proper supervision and instruction, and especially devoted to the following subjects: Drawing, architectural forms and details, especially Greek, design and composition, perspective and shadows, water colors, sketching existing buildings, descriptive geometry and graphical statics, and also building construction. The last would be improved if supplemented by practice in woodwork and masonry in a workshop. The greatest difficulty would be to find just the man to take charge of such a studio.

A note on the Architectural School of the Royal Academy was read by Mr. R. P. Spiers, who stated that the time of the students was too limited, and that they were disposed to work in almost all styles, so that a proper direction of their work was all that could be attempted. Since 1876, architects of distinction have lectured before the students with excellent results. It is found best to first arrange the plan to best suit the requirements, to base the elevations on the plan, using sound construction, leaving the question of style to the student, trusting to a gradual development of his artistic sense of design. This produces better working drawings than the best competition drawings made at the Ecole des Beaux Arts. Though the training at that school is very valuable, English architecture is better without a national school of architecture, being more progressive, as the result of the Gothic revival, architects studying principles instead of precedents. English architects exhibit greater skill than continental architects in properly treating special materials, such as wood, brick, terra-cotta, etc. This is especially manifested in some of Nesfield's designs. Burges left

models for draftsmen in his architectural drawings, not pretty but carefully analyzing the principles of ancient work. Elaborately finished drawings restrict architectural design.

A paper on "Education and the Institute" was presented by Mr. L. Booth, who said that the recently increased powers of the institute should be employed in facilitating the education of architects. If the architectural profession were made a close one by law, admission will not depend on artistic or linguistic acquirements, but on a thorough knowledge of sanitary science and construction, which are considered to be of the greatest importance by the public. Every student should be early affiliated to the institute after a suitable examination, followed by two others, the last entitling him to become an associate. The institute should suggest the course of study and conduct the examinations, held simultaneously in various parts of England. Adopting the education and training of students as one of the principal aims of the institute, all the best men would soon be brought into it, communicating the results of their experience to others.

Mr. J. A. Cotch (memorable for an unsuccessful attempt to reform masculine costume by throwing aside the "plug" hat and the "claw-hammer" coat of modern society) read a paper on "Learning to be an Architect." It is commonly considered to only be necessary to apprentice a student to some architect, letting him pick up his knowledge as he can, for which few opportunities are open in provincial cities outside London. No definite programme of study is possible, or any due appreciation of methods. The institute ought to take such pupils in hand, give them a good start, and make them feel that it has a living interest in their work. It is now only possible for the institute to direct and examine students, not to supervise their daily work. The best method for this would be by a general examination of the student, previous to his apprenticeship; afterward an intermediate examination on construction, history and materials, with a third and final one for admission as an associate.

Existing schools would soon arrange to prepare students for the first examination; the institute could direct students to proper places for obtaining instruction in the studies required for the second, though this would make a patchwork of an education, composed of parts taken from various sources.

From the preceding, it seems that English architects agree that the present provision for the education of future architects in England is about as bad as possible, but they do not accord so well in suggesting the proper remedy therefor, and no one seems quite willing to give up the idea of an apprenticeship. Possibly the usual premium of about \$1,000, seemingly paid for the privilege of picking up the chunks of wisdom found lying around in an office, and of getting in the way of the real draftsmen, may have some bearing on this point, as it certainly did in the case of the immortal Mr. Pecksniff. It would seem that these premiums might become quite important in the income of a provincial architect without extensive connections.

England is probably the only highly civilized country where the state has made no provision for the proper study of architecture. Indeed, it has been a continual surprise to the writer, that so much good work could be produced, with such a lack of professional training. It probably is the result of the influence of Ruskin, acting upon the young architects of a quarter century since, directing them to the study of the best works of Italy and France, which taught them design and construction, thereby originating good traditions in some offices. Besides, the difficulties in the way of the architectural student must discourage and divert all but the most energetic men, so that the work is done by comparatively few men selected from a multitude of aspirants. It would appear that to open a course of study at some technical college, perhaps based on those of American schools, and profiting by their experience, would not be assuming a very great risk. But the movement is likely to terminate in mere talk, that being so much easier, and not disturbing the pet hobby or interest of anyone.

In order to be professionally successful, the architect must satisfy the requirements for any given building, must employ good construction throughout, must expend the money of his client to the best advantage, and must make the structure as tasteful and pleasing as possible, within the limits of expenditure and arrangement permitted. Any successful course of study in architecture must be based entirely on these requirements, if the architect is ever to become nearly so indispensable to his clients as the lawyer or physician.

The public now looks on the architect as a necessary evil, indispensable sometimes, whose principal function is to increase the cost of a building by plastering on extraneous ornamentation. If once convinced that his true work is to expend the means of his client most judiciously, economically and safely, producing the most effective and pleasing results, the practice of the profession would be increased tenfold.

This very desirable result will never be attained by the expression of artistic longings or yearnings, or the production of æsthetical lucubrations,

but only by convincing the dear public that the client of an architect obtains a better, handsomer, and more substantial building for his money than the man who is his own architect or trusts entirely to his builder. Good construction first, then good decoration to ornament, not disguise this construction.

Grecian and Medieval architects knew nothing of many sciences now essential to the architect, but we have no evidence that they did not master everything attainable, that they were content to remain ignorant of any branch of practical knowledge. Nor is there any more reason for ignorance in these days. A properly qualified architect ought to be able to make detail drawings of every part of a building, yet very few can make the working drawings of stairs required by stair-builders. It is not sufficient to take formula from handbooks, without fully understanding the manner in which they are deduced, knowing their limitations, and how to change them to suit other conditions; otherwise, one may be entirely unable to answer a question as to the use of a new material or a new form of section. A student cannot properly understand mechanics and resistance of materials without some knowledge of the higher mathematics, especially since all American schools of architecture are affiliated with schools of engineering, and must take these studies as taught to engineers, or on a much lower plane.

Manual training is certainly essential to the student of architecture, if to anyone, for it gives him a better knowledge of the tools and modes of working materials than could ever be obtained from simple inspection. But he has not time to become a skilled mechanic in all the trades. This must be followed by taking notes of all new details of construction. It is said that Viollet-Leduc could instruct workmen on any trade in the proper methods of performing any very difficult work, taking the tools in his own hands, and that workmen always preferred employment on buildings in his charge for this very reason.

Owing to the prevalence of prosperous times and the general "boom" throughout the West, there is a great demand for draftsmen, almost anyone being able to obtain a position. Hence there is a considerable pressure on the schools to reduce their requirements for admission, and to curtail their courses of study to the lowest limits, in order to extend their influence as widely and to retain their students as long as possible. But this ought to be withstood, for half-educated men will be likely to remain bad draftsmen or worse architects forever; certainly it is not the way in which Richardson's are ever trained. This lack of proper preparation is one of the reasons that the province of the architect is now being invaded on all sides by the expert, by the sanitary engineer and the professional decorator; possibly we may see the architectural engineer looming up in the future, ready to appropriate the remainder of our professional domain.

Paper on Ironwork.*

BY C. W. TROWBRIDGE.

THIS being a continuation of the paper delivered last year† and as I have spoken almost entirely of constructional ironwork in the previous paper, this will be devoted more particularly to ornamental work, the only constructional work which I have not already mentioned being trusses and riveted plate and angle work. This is yearly becoming a more important part of the business, the superior adaptability of riveted work to building construction renders its use much more economical in many cases. It can be said that I-beams cannot be used with economy in spans of over thirty feet, and even for these spans riveted work is cheaper, particularly where the depth of beams are two feet or more. Regarding the calculation for strength of riveted work, the text books, giving quite simple formulas or tables, and the valuable hand book of the Dearborn Foundry Company give perhaps the most complete data on the subject, this book should be in the hands of all draftsman.

In cases where lateral strength is necessary, it is good policy to use double web or box girders, this form giving much more stiffness to the weights than single web or plate girders. For the support of walls and for the support of long span floors, this work is particularly economical. In case you wish the beam to project as little as possible below the ceiling, the floor beams can be coped on, or angles can be riveted on the sides, and wooden floor joists supported at any height on each side of the web. For forming balconies in theaters and a thousand and one places where you wish curved or bent iron supports, plate or angle work will be much cheaper than bent I-beams. In places where light construction is wanted, bent angles latticed are very desirable, and by a little consideration the design can be made quite ornamental. The addition of rosettes or ornamental features at the crossings of the lattice often have a very pleasing effect; by making the end panels solid and cutting out some simple geometrical form, or by cutting out a series of geometrical forms the whole length of the web, often produces a pleasing effect. Examples of this can be seen in the drawings which we have of many English railway station roofs, where this sort of work is very much used. In France and America, it is much more common to use latticed work for these places, making the design much lighter. One point sometimes neglected by designers who use riveted girders is that the loads for the transfer to the walls on which

they rest are often enormous, and they neglect to provide sufficient bearing surface on the walls; it can be generally said that walls should not receive more than ten or fifteen tons to the square foot from bearing plates, and as riveted girders usually carry enormous loads, bearing plates have to be proportioned accordingly. As an instance, in the designs of the Pickwick Club, New Orleans, there is a girder there thirty feet span, carrying several stories of wall, and in the design, the bearing plate provided was twenty-four by thirty-six and a half inches thick.

Upon investigation of the weights, it was found necessary to make the bearing two feet by eight feet; two feet, in that case, being the thickness of the wall for that purpose. We used castiron ribbed bearing-plates sixteen inches high in the center.

Regarding frame trusses, the question always arises as to whether we should rivet or use pin connections. The question hinges in a great measure on the facilities of erection. Riveted trusses are not objectionable where their length and size does not prevent their being erected in one piece; that is to say, where they can be riveted together on the ground and hoisted to place as one piece. It can generally be said that unless they weigh more than four tons, and are more than seventy feet long, they can be made in one piece very nicely. Above that size or length, it is usually desirable to use pin connections. This pin-connection work being so easily connected, pieces can be hoisted and set in the positions which they are to occupy, supported on light scaffolding pins slipped into place, and the scaffolding taken away, leaving the complete truss. For large-span, heavy-weight trusses, the pin connection also has this advantage; these connections are upon the pins themselves; whereas, in riveted work, large plates, connection or joint, are necessary, and in case of any distortion of the trusses, from deflection or other causes, no one can tell the exact course pursued by strains through a large plate of this description, and there is a consequent uncertainty regarding strains, which has to be provided for by an extra number of rivets, involving additional material and cost.

With regard to the calculation of strains in trusses, there are so many valuable treatises on the subject that I need say nothing. Such works as those of Wood, Shreve, Boller, Trautwine and many others, give all necessary data in very simple and complete shape. I would recommend Trautwine's hand book, as having more valuable information for the money than any other book in the market. It may generally be said that errors in designs of trusses are not made in the preparation of strain sheets, but rather occur in carelessness in proportion joints, and it often occurs that where large trusses are needed, it is better to employ an engineer who has had experience with bridge construction or similar work, to design a truss, as he is always up to the latest date, and can design a truss with the least possible waste of material, and consequent economy. This practice is growing with architects every year, and unless designers have more time than is usually the case, they will find it to their advantage to call in outside help on large, long trusses.

Regarding proportioning of members, I would only call attention to the fact that compression members should be of as large section as possible; that is to say, that the radius of gyration should be as large as practicable, these members acting as columns and being subject to the same conditions and rules as columns bearing vertical loads. Tension members are usually the ordinary eye-bars for small sizes, generally made with loop ends; care should be taken to have excess of material wherever welds occur. The treatment which iron receives in welding reduces its strength. In some experiments conducted by Mr. Moxham, now of the Cambria Ironworks, Johnstown, Pa., he took a piece of refined iron, such as is ordinarily used in eye-bars, and, cutting it into three pieces, tested one as it originally came from the roll; another was cut into two and welded in the ordinary manner, making the customary lap and drawing the piece to original size during the process of welding; still another was heated to welding heat, and upset under a steam hammer; when these pieces were tested, it was found that the pieces which had been welded were about five per cent weaker in tensile strength, and the elongation was about fifteen per cent less than the original bar, while the piece which had been simply upset lost fifteen per cent in tensile strength and twenty-five per cent in elongation, showing that the iron, as we might say, was totally demoralized by the process of up-setting. These things should be remembered when designing die forged eye-bars.

Differences in shop practice among ironworks produce great differences in the design of work executed by the different works building trusses for the same loads, and while they all obtain the same result by different methods, their work is practically of the same value when completed, and architects will often do well to allow contractors to adopt their own methods, as it does not result in poorer work at the completion, and will often result in saving of price to the owners. Where trusses are exposed to view, and expected to form part of the architecture of the building, there is a broad field for the exercise of taste in design; any one contemplating designing ornamental truss work, will do well to look over the published designs of French, English and German engineers. Very handsome designs for bridges and iron roofs are quite common in England and on the continent, particularly in France, where they seem to have the faculty of combining good construction with graceful outlines—they perhaps excel any other in the world in this particular. Some years ago designs for a bridge over the Duro at Oporto, Spain, were published in the French journal, *La Gene Civil*. They are well worth anyone's consideration. The French three hundred meter iron tower and many other pleasing designs might be mentioned, but you probably already know of them. One of the probable changes in the ordinary construction that will occur in the near future, is the more common use of wrought-iron gaspipe for columns of small diameters, say up to six inches in diameter, particularly where long columns are desired; not much data is as yet published upon the strength of gaspipe as columns, but we have a little in the book published by the Pencoid Ironworks, of Philadelphia, they having conducted quite a series of tests of this material, quite sufficient for data necessary for ordinary work. Joints at the ends of gaspipe columns will of course be a most interesting, difficult point to decide. The strength of screw-thread joints

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† "Architectural Ironwork," commenced in INLAND ARCHITECT Vol. VIII, No. 3.

as ordinarily made by the standard couplings now used by steam and gas-fitters, will be found of ample strength for columns of more than twelve or fifteen diameters in height, such columns fail by bending rather than crushing, and joints made with the standard thread will be plenty strong in such cases. In instances of long columns like those in the boxes at Hooley's Theater, or in cases of light construction several stories high, these columns are particularly adaptable; also in cases of verandah and stairway columns, or columns for the support of ornamental wrought-iron, they have many advantages; as an instance, I might mention the Fort Wayne railroad depot on Canal street. Along the front edge of the sidewalk, there are perhaps thirty-five or forty castiron columns supporting an awning. Of these columns perhaps seventy-five per cent are already broken by baggage wagons backing up and striking the columns, most of these have now gaspipe columns placed inside the castiron to secure strength, the castiron being left outside for ornament. If these columns had originally been made of gaspipe, with shell caps and ornaments, these breakages would not have occurred. In most cases the columns would not have been bent, but where they were bent, they could have been bent back to a straight line without damage. In using this class of columns smaller factors of safety can be adopted than with castiron, as no such elements of uncertainty enter into their composition, as with castiron columns. Gaspipe is made by rolling out iron in sheets and bending it round in a die, welding the edges together in the process; the material in consequence is of uniform thickness and of the best character, there being no flaws and no shifting of cores, or other accidents to which castiron is liable. In the construction of roofs for open structures, or where smoke is not liable to come in contact with the under side, corrugated iron has many advantages. Corrugated iron receives its transverse strength from the fact that the upper and lower parts of the corrugation act as compression and tensile members in an eye-beam or girder; the intermediate parts act as webs. This iron is made in many patterns; you can secure almost any kind of corrugation desired, and sheets up to ten feet long are in the market constantly. For roofs of sheds and for many kinds of shops and similar buildings, it has, as I said before, many advantages; however, where the temperature on the outside of the building varies from that on the inside, great trouble will be found with condensation, and in such cases, it is hardly a desirable material. Of ordinary tile and slate roofs, on iron purlines, you have so many examples before you constantly that no remarks are necessary.

Generally speaking in the designing of trusses and girders and all sorts of wrought-iron frame constructions, the use of I-beams and channels is not desirable on account of the difference in cost. Beams and channels this year sell in Chicago at \$3.40 per hundred plain, while on plates and angles the price is \$2.65 to \$2.90 according to quality. This makes quite a difference in the cost, and should be remembered in preparing the design.

Of the shop process in the construction of this class of work, very little need be said as these are matters which the designer cannot hope to control. Generally speaking, he might insist on correct matching of holes for bolts and rivets and in cases where the factors of safety are exceedingly small, drilling of holes after the pieces have been placed together might be insisted upon with good results, although this process is quite expensive; still where great lightness is *necessary*, such treatment is desirable. With regard to bent construction, members are often bent cold with good results. Any material which is suitable for these constructions will bend cold without flaws; closed surfaces should be painted before the work is put together. Pieces which have not been properly straightened, and ragged trimming of cut edges are the most common defects. These can be prevented by rigid inspection of the work as delivered. In the use of bolts, an excessive number should always be employed, as the probability is that not much more than fifty per cent of the bolts used will have actual bearing in their holes.

With regard to painting, it is generally best to have the work painted as soon as completed at the shop, as at that time very little rust has appeared. Where rust has already set in, paint is not apt to adhere, being very liable to scale off and the rust to continue. While having work delivered unpainted may facilitate inspection, it is hardly good policy unless inspection is attended to at once, and painting is done immediately. It would be worth any designer's time to give considerable study to designs for wrought-iron construction, as this class of work will probably be used more and more in the future, and so many pleasing effects are obtainable by the use of these materials that their importance cannot be overestimated. Very pleasing designs are often made in the work composed of wood and iron used together like trusses, with wood compression members and iron tension members. By chamfering the edges of wooden members, and other similar ornament, and some attention to painting the finished structures, very desirable effects have been obtained.

In ornamental work, such as railings, gates, spandrels, elevator fronts, and such work, we have many very pleasing designs in Chicago that are well worth consideration. The work in the Phoenix building, the Home Insurance and the Rookery are good examples of this class, as these designs are generally clearly artistic, with only enough construction in them to make them answer their purpose. I shall say very little on the subject of the designs; most of you are far better designers than I am, and anything which I could say would be of little value; description of the process would be probably long and tedious, and comparatively uninteresting. What we might class as clearly forged work is so very expensive that not much of it will be used. I refer, in this case particularly, to ornamental work executed hot with the hammer. Mechanics capable of doing this work are few and far between; whereas scroll work, such as can be bent cold, and similar constructions of that sort, with very little forging in them, are equally effective with the present generation of owners, and much cheaper. Among the more recent features of scroll work construction is making of scrolls in comparatively wide material, such as inch by quarter, or one and a half inch by quarter, and, where one piece crosses another, cutting out half the material from each piece and notching them together, forming a brace or fastenings for the scroll at that point, and allowing the edges to cross each other in the same plane. This has a good

effect, but of course should be avoided in places where there are evident strains to be transmitted. In such cases the iron should show its full strength and section. The combination of castiron ornament with wrought is quite common, and practicable for many places. This is a matter deserving considerable attention on the part of the designer, and one which will be able to produce many fine things. For purely castiron ornament, there is an almost limitless field. Castiron ornamental anchor-ends, cast-iron panels in stone or marble stairways or balustrades, and in many other places, can be used with good effect. Castiron balustrades are quite common in our best stairways, and many good designs have already been erected in Chicago.

In relation to design of castiron work, perhaps a little more might be said relating to the shop processes as a guide to what is possible in castiron. Models in plaster of paris are a necessity for really artistic work, and it would be good practice for architects to have all ornaments modeled in their offices. The artistic merit of the design lies entirely with the model, as artistic work can be *executed* as it is possible to model. The treasury department at Washington has done this for many years, the result being that considerable good iron ornament has come from that office. I speak more particularly of the execution of the designs than the designs themselves, although many creditable designs have originated in Washington. In speaking of the process, say that we start with the plaster model. This would show the under-cutting and projections desirable. It will be necessary, where pieces overlap each other, in castiron, that they be cast separate and screwed together. In some cases, however, where there is sufficient material to allow what we call burning together, that is, casting some of the projecting parts first and placing them in the sand in the position which they are to occupy, and pouring the additional cast afterward, part of the pieces first cast melting away, and the result being that, when finished, they are all one piece. But to return to our model. The necessary draft in order to allow patterns to be drawn out of the sand, will be put on this model by the pattern maker. Then a plaster reverse will be taken, which will be like the negative of a photograph, the reverse of all the features of the pattern. In this we will place a layer of clay of the thickness desired in the finished work; and in case both sides are to be ornamented, the ornament will be modeled on the back of this clay; then another plaster reverse will be taken. If there are few pieces to be cast, this clay will be used as a pattern, one side of the mold being rammed up directly on the plaster and clay surface, the opposite side of the mold being rammed up on another plaster block, which is a fac simile of the mold, with the addition of surface necessary to form the parting of the flask. In case of pieces that will not draw, it is often customary to make wax patterns, drawing them in parts. As an instance of this sort, I will describe the molding of a mask of a face, as occurred in our shops a few years ago. We received a plaster model from Washington of a face of Gambirinus for the Cincinnati postoffice. In this, the mustache and eyebrows were undercut. The first thing which we did was to cut out the eyes, as they had so many fine deep lines surrounding them that they must be made separately and set in sockets in the face. Then we made a plaster reverse of the face in many pieces so that they could be drawn from the face without breaking the original model. These pieces were jointed together carefully, and were about four inches thick. Over the back of these pieces we made a layer of plaster of about six inches thick, all in one piece. This gave a bed in which the pieces could be placed in their proper position, after having been drawn from the model, leaving an exact reverse of the face, into which we could put our clay for forming the thickness of the casting, by making some parts of this clay a little thicker than at others, we were able to make a back block which would draw in one piece. After making this back block, the clay was taken out, the back replaced and the space which, of course, represented the future thickness of the iron was run full of wax; when this was cool, we removed the back block and cut the wax into many pieces; the joints coinciding approximately with the joints originally made in the plaster reverse of the face. We were thus enabled to remove our pattern in pieces and place them on the back block in their proper position, so that we had a very good pattern from which to make our sand molds. We rammed the drag or bottom part of our flask directly over this wax face, then rolling our flask over, we withdrew the back piece, leaving the wax pattern in the sand; on this we rammed up the cope or top part of the mold, the cast being made face down in order that any loose sand would rise to the top or back part of the cast, and not mar the surface of the face; after lifting off our cope we withdrew the wax pattern in pieces; of course, then, this flask would be closed, and poured in the ordinary manner with iron, and the pattern of wax lasting in this case for the entire order, about fifteen masks. When there are a large number of pieces, iron patterns are made. This general principle of procedure is in common use for all classes of ornaments, and, as you will see, the general principles embodied in this case will enable the production of pretty nearly anything in castiron. A very good description of the process of modeling castiron statues, animals, and such things as we see in the parks, is published in Overman's treatise on founding and casting, which would be quite instructive and interesting reading for any one designing castiron ornament. The shrinkage strains in ornamental work will be provided for by the foundrymen. There are two ways of providing for these shrinkages. One is by proportioning the metal so that the pieces will come out of the mold straight; another is to cast your ornament so thin that it will spring straight when fastened in place. Foundrymen differ as to the best process, and would probably insist on using the one with which they were most familiar.

In this matter, it is good policy to give plenty of latitude to the foundrymen in the matter of thickness, letting him do about as he pleases, insisting only upon the correct production of the artistic results desired. One of the most striking incidents of casting pieces thin enough so that they can be sprung straight, was in the production of the castiron window and door frames for the Cincinnati custom house. There are iron frames and architrave moldings there of twenty-four to thirty inches girth, cast in pieces twenty feet long, thickness of metal only about three-sixteenths of

an inch. This was thin enough so that the erectors were able to spring them straight, fastening them to the walls perfectly straight, even if the castings were somewhat crooked when they came out of the sand. As few foundrymen are capable of producing this sort of work, it is more common, and, generally speaking, a cheaper way is to cast the edges a little thicker than the other parts, so that heat radiating in all directions from the casting will be supplied to the edges by this extra thickness in sufficient quantities that the casting may cool uniformly throughout. In making large panels of castiron ornament, it is desirable that as little plain surface as possible should be allowed. Large, plain surfaces of castiron are hard to produce, and often quite unsatisfactory, as I said in my previous paper. The cope or upper part of the mold is provided with cross-bars, spaced from four to six inches apart, to form supports for the sand in ramming the mold. It is extremely liable to occur that the sand under these cope bars will not be as solid as that between them, and when the mold is poured the iron will force under these bars, forming little ridges possibly one-sixteenth of an inch high, but when the sun strikes across the face of the cast these little marks will appear, and are decidedly undesirable; whereas if ornament is used pretty freely, these little ridges do not show as plainly, and little imperfections of that sort cannot be noticed.

As a rule, you cannot get castiron too rich in ornament, as far, at least, as the execution of the work is concerned, and it is good policy to put on all the ornaments that the design will stand. On castiron surfaces, where there is considerable repetition, this would cost little or nothing more than plain surface, and are sure to be far more satisfactory. In such cases as we spoke of, and for wainscoting running up the stairway, around halls, castiron is often a very desirable material, being usually cheaper than marble, especially where ornament is desired, and not liable, like marble, to be injured by carelessness of people carrying things up and down the stairs.

With regard to iron store fronts, there is every probability that this material will be a favorite one in years to come. The possibility of having large openings, plenty of glass and lots of light, makes this material particularly desirable, and the ease with which light and graceful ornament can be executed, and the great varieties of style which can be adopted in the design, recommend iron for these purposes. Already we have many buildings where light gaspipe columns are used with intermediate panels and horizontal lines of ornamental cast or wrought-iron, which form very desirable buildings, and keep the cost of the front within reasonable limit. Where all castiron is used for a front, it is good policy to joint each piece together with lap-joints, as in this case shop work in fitting of butting joints is avoided. This is not very important, however, as in many shops machinery for making nice butt joints and for fitting of miters and joints of this description is in use. We have in our shop machinery for making miters and butt joints on cast or wrought-iron, that will make joints that are positively water-tight, metal to metal, more cheaply than we could previously produce them by the ordinary method, with chipped joints and putty.

Finally, with regard to the coating or finish applied to iron, there are three methods now in quite common use, namely, painting, electroplating and Bower-Barff. Painting, as you all know, is by far the most common, and what I said before regarding the painting work, as soon as possible after completion, is about all there is to be said on the subject. With regard to electroplating for interior work, this, probably, has no equal as a fine finish. The use of emery wheels and emery belts enables a sufficient surface polish to be given in a piece of castiron to enable electroplating to be used effectively. This process is not expensive; of course, it costs more than painting, but as a process is not expensive, and will be cheaper and cheaper as we have more work of that description.

In Bower-Barff it is different. This process is covered by patents, and at present is only in use by three or four firms in the United States.

The coating which they produce is magnetic oxide of iron. It is quite similar to what we see on iron when it comes fresh from the rolling mills, with this exception that the coating is made thicker by the Bower-Barff process, so as to be rust proof. For wrought-iron there is one objection to Bower-Barff work—which is quite serious. This coating is hard and brittle like glass or porcelain, and if the iron is bent, will crack, leaving places which will rust and look bad. If the iron is not expected to be within reach of the hand, and consequently not liable to be bent or distorted, this forms an excellent finish, or if the pieces are sufficiently stiff and strong to resist attempts to bend them, the same may be said; for the castiron, the brittleness of the metal is such that the casting will generally break before the coating is destroyed; in the production of this coating the iron is brought to a red heat, and remains so for a considerable time. This results in more or less permanent expansion of the iron, and other conditions which render the fitting a matter of considerable care, and, consequently, considerable expense. The price of this work will always be higher than electroplating, and some people think that, like blue glass, it will eventually go out of style. I have already taken up considerable time, and I fear I have not made as interesting a paper as my previous one. Perhaps that is not saying much for the previous paper, either. However, this matter had slipped my mind until I received the secretary's postal card, announcing the meeting, and paper by Mr. Trowbridge, and then I neglected it for other pressing business. I hope you will excuse shortcomings in the matter of study and care which should have been put on this paper.

A COPY of the *Advertisers' Manual* is received. It is a neat, compact volume, designed for the use of general advertisers, and published by Remington Brothers, newspaper advertising agents, Pittsburgh, Pa. This book, the first work of the kind published in Pittsburgh, contains in very convenient form a carefully revised list of the leading papers of the United States and Canada. The book contains a large amount of information invaluable to the business man who contemplates the use of "printers' ink," and its concise and compact arrangement make this information readily available, a point which busy men will appreciate.

The National Association of Builders.*

THE Executive Committee of the National Association of Builders convened in Chicago during May 23, 24 and 25, investigating the labor question which has disrupted the building trades. Previous to adjournment the committee issued the following address to the Builders and Traders' Exchange of Chicago, and all filial bodies of the National Association of Builders and the general public.

In view of the serious disturbance to building interests in the city of Chicago, and the widespread influence likely to flow from it to other localities, affecting not only the building trades but all branches of industry in the United States, it has been thought wise to call the Executive Board of the National Association of Builders to this city to carefully examine the situation, investigate the causes which have produced the existing conditions, and report thereon to all filial bodies for their information, together with such suggestions for their future action as may seem wise and best. All interested parties (and every business has interests more or less directly involved in this question) should thoroughly understand that the National Association of Builders assumes no powers of a dictatorial character; it simply meets as an advisory body, and communicates its conclusions only in the form of recommendations, which its affiliated associations may or may not adopt or follow, as the circumstances by which they are surrounded demand. But it should also be borne in mind that the National Association endeavors to confine its expressions of advice and recommendation to the general principles which underlie and effect conditions in all localities, and in this especial issue and crisis which has arisen in one of the most important business centers of the country the executive board intends to be particularly careful, while considering the facts which exist in this city, to avoid as much as possible in its advice or recommendations all local or superficial issues, and deal largely with the problem that is rapidly demanding solution in every city and town in the land. It is one of the purposes of the National Association of Builders to keep a watchful guard over the interests of builders everywhere throughout the country, giving its advice and assistance to all its members when difficulties arise, using its influence with them to secure and maintain just relations, either in their contact with each other or in their relations to owners, architects, or workmen, and prevent the incroachment of other interests upon ground that belongs to them. The exact circumstances that have brought about the present blockade of business in Chicago may not be absolutely identical with the issues that have caused similar disturbances in other cities, and they may not be exactly reproduced in the future in any other locality, but the root from which they spring has been planted everywhere, and while the plant may be good and worthy, it is a matter of the greatest concern to all that the growth from it be carefully watched and held in check, lest it assume such rank and oppressive proportions that other interests equally valuable and necessary be overgrown and choked. It is sometimes necessary to prune a vine of rank and unhealthy growth in order that it may bear good fruit. We apprehend that the experience of the builders of Chicago in this crisis will be of great importance to builders in other cities, and we hope to utilize their experience in such a way that general business interests will be better protected and preserved in the future, and the proper purposes, opportunities, and interests of the organizations of workmen maintained and encouraged, and that the individual workman himself, whether he be connected with organizations or independent of them, may be placed in a position where he may exercise unquestioned his rights as an American citizen.

In this endeavor we ask the coöperation of all business men, particularly those whose affairs bring them into direct contact with the difficult and perplexing questions incident to the employment of labor, and the community generally, for the public, as a whole, has an immense stake in this question of individual liberty. We have endeavored to make our inquiries in a disinterested spirit, and in pursuance of this purpose have given hearings to the employing builders, the bricklayers' union, non-union workmen, manufacturers, merchants, bankers, architects and business men generally, believing that we could only consider the question fairly by listening to all sides and opinions. The result of our investigation leads us to report as follows:

The demand for pay day on Saturday by the bricklayers' union, which precipitated the present blockade of business in the building trades in Chicago, was, in itself inconsequent and trivial, and a concession or denial of it, on its merits, would have been immaterial, but it was presented in such a manner (at a time when the hodcarriers' strike in progress had been supported by the Amalgamated Building trades), and had been preceded by such concessions on the part of the employers, that they felt this to be the "last straw," and that their duty to themselves and others compelled them to make a stand and demand a surrender of the rights which had been previously abrogated.

In this course, and in the manner in which the builders have presented their convictions and method of future action, we believe that nothing has been done beyond what the situation imperatively demanded, and the safe and proper conduct of business required. We are only astonished that the crisis has not been sooner reached.

It seems to us that this strike or lockout was not caused by a demand that it was impossible to grant, but was the direct result of the assumption by organizations of workmen, for a number of years, of rights not properly within their jurisdiction, and the demand, coming as it did under such aggravating circumstances, occasion was properly taken, in our opinion, for a complete cessation of business, in order that it might finally be decided and settled whether the employer should for the future be free from further incroachments, and that he might recover those rights and prerogatives which properly belong to him. It is worthy of note that this issue or demand was not made in the dull season, when it might have been more easily arranged, or at least considered, but after the busy season was commenced, and in addition to and in support of the existing strike.

* Revised for the INLAND ARCHITECT, by W. H. Sayward, Secretary N. A. B.

The union making it did not seek to consult the employers in regard to its feasibility, although after it was promulgated (the employers requesting a reconsideration) a slight alteration was made in one of the details.

It appears, according to the testimony of the bricklayers' union, that there has been no general strike in their trade for the last four years, but they admit that during that period they have been successful in enforcing certain rules and regulations in regard to control of journeymen and apprentices (which are set forth in their printed Constitution and By-laws), and that the enforcement of these rules has caused strikes or stoppages of work in many cases, upon certain jobs.

It is in the rules and regulations referred to that conditions are imposed which the builders claim are an encroachment on their peculiar rights, as well as the rights of independent workmen, and that in submitting to them they have made concessions which they can no longer endure. In this opinion we entirely and heartily concur.

We will cite a few of these rules, calling attention to the fact that although the employers have at least an equal interest in the matters treated, they have never been even consulted in their formulations, but have been expected to comply with them as presented, and have so complied, for the reason, as they claim, that they could not help themselves.

The first rule, or regulation, or custom which demands notice is that which prevents the workman not a member of the union from obtaining work. This is excused by the declaration of the union that they do not claim that the non-union man shall not work, they simply will not work with him; but this explanation is purely a clever evasion of the point at issue, for the workman is, by force of circumstances, deprived of opportunity to labor, and the position taken by the union is manifestly a conspiracy against the rights of the individual. It may truly be considered the first step toward setting up an oligarchy in the midst of a free people. This assumed right is most tenaciously held, and is one of the most dangerous expedients ever adopted by a voluntary association. We believe it to be a direct attack upon individual liberty, and an evil that will react upon those who attempt to establish it. We also believe it to be entirely unnecessary for the welfare of unions, that all the ends they wish to gain can be secured by legitimate measures, and that not until they cut out this cancer will harmony be restored and reforms established.

This custom should be constantly and absolutely denied. The next rule which we wish to consider is that establishing a "walking delegate." Some of the functions of this officer (if he may be so designated) as explained by members of the union, are perfectly harmless, and possibly quite a convenience, but if proper relations were permitted to exist between employer and workman, these functions could be equally well maintained by the foreman on the job. There are other powers, however, with which he is invested, which are so arbitrary in their character, which deprive the employer so completely of that control of workmen necessary to the conduct of his work, that it is simply ridiculous to submit to it. For instance: "He shall be empowered to use his personal judgment on all points of disagreement between employer and employé between regular meetings." Art 5, Sec. 4.

The simplest mind can readily see how little control the employer has left him, when a man not in his employ is permitted to come upon his work and "use his personal judgment" in questions of disagreement, the workman being obliged to then obey his orders. The employer seems to be a mere cypher under this arrangement, and can only fold his hands and wait until the "regular meeting" (at which he has no opportunity to be heard) settles whether the "personal judgment" exercised be just and fair. The result can be imagined. In the hands of an exceptionally honest and discreet person, such power would be dangerous enough, but in the control of a man who may not possess these qualities, or possess one of them without the other, the chances of stoppage of work under his orders, the constant annoyances to which employers and owners may be subjected, makes this infliction too grievous to be borne.

The thousands of unnecessary strikes, stoppages and obstructions to work for every conceivable cause, or no cause, which have occurred in all parts of the country, in the name of justice and the "walking delegate," are evidence enough that to owner, architect, employer and workman, he is an abomination not to be tolerated.

As an adjunct to the "walking delegate" comes "the steward," who, like him, has some functions perfectly unobjectionable, but who in other ways is empowered to assume certain directions and control which surely is not consistent with the duties of a workman—that is, if the workman is considered to have any duty to his employer. It is noticeable that in the description of the duties of these two gentlemen, it is the "interests of the union" only that they are directed to observe. It is true that the "walking delegate" is not an employé, but he is to have free access to the work, can interfere and obstruct as he pleases, but the interest of the employer seems to have been omitted in the recital of his duties.

When it is considered how much is taken off the hands of the employer by these two persons, it is somewhat a matter of surprise that owner and architect burden themselves with the useless middleman, the nominal employer, when they can have the whole matter handled by the union and its agents.

The rules in relation to apprentices are peculiarly restrictive, and leave nothing whatever that is worth possessing in the hands of the employer. We can not imagine why any contractor would care to have apprentices at all, if their direction and control is to be so completely out of his hands. These rules declare that "no contractor shall be allowed to have more than two apprentices at a time"—"he will not be allowed any more until their term is completed,"—"he may then replace them."

The contractor must sign such indentures as are prepared by the union without consultation with him. "No contractor will be allowed to have an apprentice over eighteen years of age, unless he be the son of a journeyman who is a member of the union." Apprentices must also be members. The contractor is thus debarred from putting his own son at apprenticeship if he happens to be eighteen years of age. This appears to be most emphatic special legislation. In fact, the whole management and control of apprentices is virtually in the hands of the union, and we submit again that such

action as this is most indefensible and pernicious. It has already caused a tremendous reduction in the number of young men learning the trade, and if practiced in other branches of business would create a state of revolt among the people, and would be denounced throughout the length and breadth of the land as a violation of the rights heretofore supposed to be secured when this country became a republic.

Foremen upon the work must be members of the union. Inspectors upon public buildings must be practical bricklayers in the opinion of the union and members of it—in fact, there are so many points that demonstrate the development of this one-side power of the union, and showing abuse of their place and mission, that we cannot take time or space to enlarge upon them.

To our mind the constitution of this union and many others is framed upon the assumption that all employers are dishonest, bad men; so all are to be made to suffer.

The union seems to have come to the conclusion that the laws of the land are not sufficient, and they propose to be not only a law unto themselves but a law unto all others who come in contact with them. This assumption, if permitted to stand and grow, will tend to disintegrate the whole social and political fabric upon which citizens of this country depend for protection, and we believe it to be our duty to call upon all good citizens to deny it in unequivocal terms.

We submit that these "rules" which we have quoted and other questions which have naturally grown from such development of power, that are neither written nor admitted by the union but which actually exist, are distinctly an encroachment upon the province of the employer; that, under them, he is robbed of that control and authority absolutely essential to the proper conduct of his business. Submission to such dictation as this simply opens the door wider for further interference, and the employer is not secure from day to day from new and harassing demands, so that eventually he will have practically nothing left to him but the "privilege" of paying the bills. The crisis here in Chicago is of tremendous importance and significance to every builder and every business man, not alone in this great and rapidly growing city, but in every city of the country, for here is seen a demonstration of the tyranny which becomes possible when improper methods are submitted to—a tyranny which holds the workman in its grasp quite as surely as the employer, and this experience and demonstration should be a timely warning to all.

Labor unions have gone too far. They have mistaken their functions and overstepped their boundaries.

The time has come to "call a halt," and to demand a surrender of that which had been improperly obtained. To do this will require some patience and some sacrifice, but the end to be gained is but just and right, and worth all that it may cost.

Better that not another brick be laid or another nail be driven in Chicago for a year than this opportunity be lost to regain the rights and prerogatives which make it possible for employer and workman to be independent and successful.

Let nothing be done to injure the unions in the prosecution of their rightful purposes; they have a most important mission and a great field for usefulness. Aid and assist them in these things by every means in your power; but for their own good, as well as your own safety, stand constantly and steadfastly opposed to any and every attempt to take away that which makes you an employer, or from the workman himself the right to work.

Trade-unionism in theory, and as it may be consistently and intelligently carried out, can be a most useful aid to all concerned, but as at present managed, clinging fast as it does to the cardinal principle of the rights to prevent any and every man from working who does not happen to belong to the order, it is a bane to society and a curse to its members. We approve of the position taken by the builders of Chicago in this emergency, and we congratulate them that other branches of business whose interests are closely interwoven with theirs, have had the courage and willingness to make common cause with them, recognizing, as they evidently do, that if this sort of dictation is permitted to grow, that their own position will become undermined, and their security vanish. We congratulate them, also, that general business interests are giving them such hearty coöperation and support, and we feel assured this will continue until the victory is won.

We recommend all filial associations of this body to assume the same attitude in the event of an issue being forced upon them by further encroachments, and we suggest to them, as well as the Builders and Traders' Exchange of Chicago, that they encourage all workmen who wish to have an opportunity to freely work, untrammelled by the improper requirements and rules of voluntary associations (which, as far as most workmen are concerned, have become involuntary), and that they be protected in their work, it will be wise to create and establish at once a bureau of record in connection with their associations, where any and all workmen may put themselves on record as assenting to the principles of individual liberty announced here in Chicago, and by and through which the workmen so assenting will be kept at work and protected, in preference to those who deny these principles. Let steps be taken, after a certain time given to develop the honest purpose, good character, skill and ability of the workmen, to make them members of your own association, and so institute, for the first time, a union wherein employer and employé shall be joined, and their interests considered in common, as they properly should be. We believe this would be a step in the right direction, and the dawn of the day when the two branches of workmen will not be arrayed against each other, but will consider and act in concert for their mutual benefit. Closing now our report to filial associations, we wish to address a few words to the public at large, whose servants we are:

We believe that the builders of this country stand today in a position which commands the attention of all kinds and classes and business men everywhere. We wish to do only that which is right and in accordance with the principles upon which this republic was founded.

Individual liberty is the dearest possession of the American people. We intend to stand by it and protect it in every emergency, and to our

mind there has never been before presented an occasion more significant and decisive than the present, and in doing now all we can to maintain it we feel that we are fighting not for selfish ends alone, but for the welfare and protection of every individual in the land.

Individual liberty is not incompatible with associations, and associations are not incompatible with individual liberty. On the contrary, they should go hand in hand. We call upon all to sustain us in maintaining all that is good, and in defeating all that is bad in this difficult problem of labor.

Liberty is our watchword, and this struggle is but a continuation of that endeavor which began a hundred years ago, when a little band of patriots at Concord bridge fired that shot heard round the world, which was the first blow in establishing American independence.

J. M. BLAIR,
EDWARD E. SRIENER,
WILLIAM H. SAYWARD,
JOHN H. TUCKER.

Executive Board of the National Association of Builders.

Chicago Builders and Traders' Exchange.*

THE committee consisting of George C. Prussing (master mason), H. L. Turner (real estate), William Hearson (carpenter), J. B. Sullivan (painter), and Edward Kirk, Jr. (galvanized iron), appointed at the meeting of the Conference Committee, May 18, to formulate a plan of action, submitted a report, which was published in the Intermediate News number. On May 23 the committee revised the report, the main change being the substitution of "assent" for "signature," and adopted as follows:

To the representatives of building interests in conference assembled:

GENTLEMEN,—In order to carry into effect the platform adopted by us, your committee recommend:

First. That from this time forth the assent to the following code of principles by the employé be made a universal condition of employment by all building interests of Chicago, viz:

I recognize the right of every man to decide for himself, when he shall work or cease to work, where he shall work, for whom he shall work, how many hours he shall work, and for what wages he shall work.

I recognize the right of the employer to decide for himself, whom he shall employ or cease to employ, and to regulate and manage his business with perfect independence, provided only that he deal lawfully, justly and honorably with all men.

I recognize the right of every father to have his son taught, and of every son to learn any lawful trade, to be the same as his right to a knowledge of reading, writing, or any other branch of learning, which should be subject to regulation only by the laws of the land.

By accepting employment I agree in all my relations and intercourse with my employers and fellow workmen to maintain and live up to these principles.

Your committee recommend:

Second. That this conference recommend to our respective organizations to request each of its members to employ such workmen only who recognize the inalienable rights as above set forth.

Your committee recommend:

Third. That public announcement be made at once that business will be resumed on or before June 1, 1887, with this card of principles as a basis.

Your committee recommend:

Fourth. That a standing committee of one member from each of the building trades, the Chicago Real Estate Board and the Illinois State Association of Architects, to be known as the Central Council of the Building Interests of Chicago be appointed, whose duty it shall be to see to the carrying out of these principles; that it shall have a sub-committee of safety, whose province it shall be to see that ample protection to all is afforded; with sub-committees on grievances, strikes, arbitrations, and such as may be found necessary, but that it work always and solely for the maintenance and protection of the principles herein laid down.

Your committee recommend:

Fifth. That an address to the workmen of the building trades and to the general public, be prepared, setting forth your action and your reasons therefor; that 50,000 copies be printed and immediately distributed.

Your committee recommend:

Sixth. That a fund be created to defray expenses of this Central Council, and that we request each association here represented to transmit to the order of Geo. Tapper, chairman, the sum of twenty-five cents for each of their members, and that individual contributions of people interested in this work be accepted.

METAL WORKERS.

The annual meeting of the Association of Metal Workers of Chicago was held at the Grand Pacific Hotel, May 28.

Officers were elected for the ensuing year, the election resulting in all the old officers being reelected, with the exception of an alternate on the executive committee.

* Continued from May Intermediate News Number (page 69, Vol. IX, No. 7), as a complete record to date of the important measures taken by the building interest of Chicago in the direction of a permanent settlement of labor disturbance and the eradication of disturbing elements.

R. T. Crane, president; J. McGregor Adams, first vice-president; John T. Raffin, second vice-president; W. J. Chalmers, third vice president; Robert Vierling, secretary and treasurer; R. T. Crane, J. McGregor Adams, W. J. Chalmers, Frank I. Pearce, M. C. Bullock, Louis Wolff, George Mason, John T. Raffin, A. Plamondon, executive committee.

The executive committee presented a set of resolutions, which were discussed, and after a few immaterial changes, were adopted as follows:

WHEREAS, We know there are organizations existing which deny the rights of the individual as guaranteed by the constitution of the United States; and

WHEREAS, We believe it our duty as citizens to range ourselves with others in the assertion and defense of the rights of man, be he employer or workman; now, therefore,

We affirm that absolute personal independence of the individual to work or not to work, to employ or not to employ, is a fundamental principle which should never be questioned or assailed; that upon it depends the security of our whole social fabric and business prosperity, and that employers and workmen should be equally interested in its defense and preservation.

We recognize that there are many opportunities for good in associations of workmen, and we will aid and assist them in all just and honorable purposes; that while upon fundamental principles it would be useless to confer or arbitrate, there are still many points upon which conferences and arbitrations are perfectly right and proper, and that upon such points it is a manifest duty to avail ourselves of the opportunities afforded by associations to confer together to the end that strikes, lockouts and other disturbances may be prevented.

We recognize that permanent harmony between employer and workman can only exist when both agree on the justice and right of the principles set forth. Now, therefore, be it

Resolved, That all members of the Association of Manufacturers in Metals be, and they are hereby requested to display, in office and workshop, the above declaration and the following code of principles:

"I recognize the right of every man to decide for himself, with employers, without dictation or interference, when he shall work or cease to work, where he shall work, how many hours he shall work, and for what wages he shall work."

"I recognize the right of the employer to decide for himself whom he shall employ or cease to employ, and regulate and manage his business with perfect independence, provided only that he deal lawfully, justly and honorably with all men."

"I recognize the right of every father to have his son taught, and of every son to learn any lawful trade, to be the same as his right to a knowledge of reading and writing, or any other branch of learning which should be subject to regulation only by the laws of the land."

"By accepting employment I agree in all my relations and intercourse with my employers and fellow-workmen to maintain and live up to these principles."

Resolved, That full powers be and they are hereby granted to the executive committee to take all steps by them deemed necessary to carry into effect the principles heretofore set forth, and to express the concurrence of this association with the position taken by the Master Masons' and Builders' Associations.

This action, it was stated during the discussion of the resolutions, was not the outgrowth of sympathy only, but caused by the fact that metal men are suffering just as much as anybody under the present trouble in the building trades in Chicago. There are not cast seventy-five tons of building ironwork a day in the city at present, when there ought to be three hundred tons at least. It was also stated that the depression of trade is so marked already that two foundries will shut down next week, throwing two hundred and fifty men out of work, and all the establishments are glad to have a pretext for closing Monday, although they have not been in the habit of stopping work on Decoration Day during the busy season.

MASTER MASONS AND BUILDERS' ASSOCIATION.

The Executive Committee of the Master Masons' Association, June 1, issued the following address:

To the Bricklayers and Stonemasons of Chicago:

GENTLEMEN,—To those of you who have families to support; who, by frugal saving, have laid by a store for rainy days; who, perhaps, have invested surplus earnings in a house and lot, or made partial payments on a piece of land for a future homestead, and thereby have acquired an interest in Chicago—to you we speak.

To those of you who have joined the now existing union under compulsion, and are today afraid of personal injury, should you in any way assert your independence; to those of you who feel the abuses practiced, who are not in accord with the ruling clique, who have informed us time and again that you are not granted a hearing when your opinion is not in harmony with that of "the gang," and that you consequently do not attend the meetings of said "union,"—to you we appeal.

To those of you who believe in arbitration as a better mode of redressing grievances or adjusting differences than the strike or lockout; to those of you who are old enough to remember that the members of our organization have all been journeyman bricklayers and stonemasons, that there are none among us who may not be compelled to take up tools again, nor any among you who may not at any time become employers, and that, consequently, there are no questions concerning one branch which are not of interest to the other,—to you we address ourselves.

This association, together with other associations of builders, has issued a platform affirming our adherence to the fundamental principle of individual liberty. Read it, discuss it, digest it. It is right. It is guaranteed by the constitution of the United States, and he who denies the rights of man is not an American citizen, and by his denial affirms that he does not intend to become such, although he may have gone through the form of acquiring citizenship.

We are not opposed to all unions.

In the second paragraph of our platform we recognize the right of organization among workmen for all just and honorable purposes. But we are opposed to the methods employed by the present union. Brute force is used in all directions to compel fellow-workmen to join and keep them in line in support of any action taken, no matter how unreasonable; to enforce the assumed control of the business of employers; to arbitrarily keep boys from learning the trade; to deny the right of mechanics to support their families by working at their trade in this city, etc. In all directions brute force is the foundation of the present union. This is wrong. Brute force can only be opposed by brute force, the strike on the one hand opposed by the lockout on the other, resulting in loss and suffering to both, and without any permanent results, for no matter which side is successful, the only thing proven is that it had the strongest organization, not that its position is right. Strikes and lockouts, with all the train of resulting evils, can only be prevented by organizations among both workmen and employers, both recognizing the same fundamental principles and agreeing to refer any question of temporary policy, such as the amount of wages to be paid, number of hours to be worked, pay day, and others, or any grievances or differences arising in the future, to a joint committee of arbitration—work to continue without interruption, and questions at issue to be decided definitely by the committee.

The "walking delegate" has proved himself an unmitigated nuisance. To give into the hands of one man power so absolute will always be dangerous and sure to be abused. Nor will the necessity exist for a "walking delegate." His place will be filled by the arbitration committee. That the laws of the state shall prevail in regard to apprentices, as well as to other subjects by them covered, needs no argument.

All must recognize that foremen are hired to be the agents and representatives of the employer for the faithful and economic performance of the work, and, as such, should be under his exclusive control.

Of "stewards," we need not treat here. Acting for an organization which acknowledges as right and just the principles contained in our platform, their duties cannot interfere with the proper prosecution of the work.

To sum up, form a union on the same platform we uphold and men will join it because of the benefits to be derived—brute force will not be necessary in any direction—and whenever one hundred, and, yes, fifty, members shall have enrolled themselves, we will gladly recognize it and appoint members to serve on a joint committee of arbitration, to have charge of all matters of mutual interests.

We mean what we say.

Fault has been found with the "working rules" adopted. These will be subject to joint discussion and adjustment when a joint committee of arbitration shall be in existence. Until then we have agreed to nine hours as a working day, because that is the rule adopted by other large cities, and Chicago should not be at a disadvantage as a point for investment in comparison with them. We believe the Saturday half-holiday has come to stay with us as one of the recognized institutions of the country, and we have adopted it freely and voluntarily. By agreeing to forty-five cents per hour as a minimum rate of wages we trust to have proved that we do not desire to lower rates. A regular fortnightly pay day has been guaranteed.

These are our conditions. Discuss them as to their fairness, and if you find them just come to work, and we shall be glad to employ you as far as still in our power, for it is true that each day of continued strike does lessen the chance for a busy season.

The situation in brief is as follows: The general public recognizes the present necessity of coming to a fair understanding between employer and workman—and thereby laying the foundation for future harmonious action—by refusing to build under present circumstances. Some work must be done, no matter what the conditions. But there is not one-fourth of the work on hand now there was last year at this time.

For its future growth and prosperity Chicago needs manufacturing enterprises. In the selection of a site for such, people with money to invest look for security from violent and arbitrary interruption to their business. Abolish the "walking delegates;" show that you have profited by the lessons of the past, and establish arbitration; lay the foundation for peace and harmony between employer and workmen, and Chicago will be the place selected; business, now dull and dragging, will revive, and steady employment will reward both you and us for sense and moderation shown.

Fraternally yours,
THE CHICAGO MASTER MASONS' ASSOCIATION,
By Executive Committee.

CONFERENCE COMMITTEE.

The last meeting of the Committee of Conference was held June 1. Reports from each association were called for and all responded, each making reports, in substance being that their associations had indorsed and adopted the report of the Conference Committee, and would work in accordance with the platform of principles therein. Some of the associations had not set a day when this should go into effect, however. The most important report was that of the cut-stone contractors, who, through Mr. T. C. Diener, made the following report, premising it by saying that the members of the association were in accord with the principles which had been enunciated by the Conference Committee:

To the Conference of the Building Trades: The Cut-Stone Contractors' Association has carefully considered the code of principles adopted by your committee, and, although approving of the principles laid down, we could not adopt them as a whole, and therefore deem it not advisable to ask the assent of our employees as a condition of further employment after June 1, for reasons hereafter mentioned:

Fully indorsing the right of any employé to work for whom he chooses, we do not concede that individually he can regulate the number of hours he desires to work, but in that respect must comply with the established rule of number of hours per day.

In our trade eight hours per day for stonecutters has been the system for the last twenty years. It has been a success in every respect, for today, with improved machinery, cutstone is fully 50 to 100 per cent cheaper than during the ten hour time.

Conceding the right to each man for what wages he will work—we maintain that it is to the interest of the building trade generally that a rate of wages be adopted at the opening of the season, thus making it a standard basis for contractors to estimate by.

In the matter of apprenticeship we also maintain that it is to the interest of the boy and the employer of the same. For by employing too many boys in our trade a foreman would not have the opportunity to train the boy, and he would turn out a poor mechanic.

It is a rule and regulation similar to educational institutions. To make these rules has been the motive which has prompted employees and employers to organize. In the cut-stone trade we have an association of stonecutters and an association of contractors. These two bodies recognize each other, and at the beginning of the season, as has been done heretofore for years, they have agreed on a rate of wages, number of hours per day, and number of apprentices to a yard (which is about one to six men), and, therefore, we are in duty bound to abide by the same.

We have, furthermore, a written agreement between our two organizations, of which Article I is as follows:

"All disputes or misunderstandings of any kind that may arise shall be submitted to committees, who shall report to their respective associations before final action shall be taken."

And Article VI is as follows:

"These rules not to be changed or altered except by the consent of each association, and in that case a thirty days' notice to be given by the party desiring to terminate said agreement."

In our discussions and conclusions we have also been guided to a certain extent by the press, to avoid, if possible, a general lockout, and by that part of the platform of the National Association of Builders, "that good may be derived from proper organizations," and it is our aim that our associations shall not only be a benefit to themselves, but to the general public. Respectfully submitted,

T. C. DIENER, Secretary.

Mr. H. L. Turner, of the Real Estate Board, said there had been no meeting, but he was satisfied that the principles would be approved by his organization. (A meeting of his association, held the same day, indorsed the principles, and appointed Mr. Turner to the Central Council.)

Mr. P. B. Wight stated his company had secured nearly all the men needed to complete the fireproofing upon the Rock Island depot, and by the close of the week would have all it could use, and it was working without interference from the members of the union. It was working under the rules adopted.

Mr. Prussing said for the information of those present that some of the bricklayers in the city were going to work, and others would do so but for fear of bodily harm from union bricklayers. As soon as the men could feel assured that they would not be interfered with by many of them, would go to work. At present there were nearly three hundred bricklayers at work in the city who hold no allegiance to the bricklayers' union in Chicago.

The Committee of Conference then adjourned *sine die*.

THE CENTRAL COUNCIL.

In accordance with the request of the conference of the building trades, the delegates to the Central Council of Building Trades, of Chicago, met June 1. The various trades were represented as follows:

Metal workers, Robert Vierling; steamfitters, H. G. Savage; cut-stone contractors, T. C. Diener; master plasterers, John Sutton; gravel roofers, M. W. Powell; master masons, George Tapper; master painters, J. B. Sullivan; galvanized iron cornice, Edward Kirk, Jr.; carpenters and builders, William Hearson; North Side brick manufacturers, A. J. Weckler; fireproofers, P. B. Wight; non-union stonecutters, C. B. Kimbell; Builders' and Traders' Exchange, F. C. Schoenthaler.

Delegates from the Master Plumbers and the Illinois State Association of Architects, were not present, because none had yet been appointed.

On motion of William Hearson, George Tapper was elected chairman and F. C. Schoenthaler secretary.

At the suggestion of Mr. Vierling, a committee of three was appointed to prepare a plan of organization, with instructions to report at the next

meeting. The committee is as follows: H. G. Savage, Edward Kirk, Jr., and William Hearson.

The council then adjourned until June 3 at 2 o'clock.

The Central Council again convened June 3, and the Committee on Rules appointed at the last meeting submitted the following report, which was discussed and adopted as the rules governing that body:

I. This body shall be known as "The Central Council of the Building Interests of Chicago."

II. The object of this council is to promote the building interests of Chicago, harmonize the different branches, and adopt such measures as from time to time may be found beneficial, carrying out the following platform of principles, which has been adopted by the various associations herein represented.

PLATFORM.

We affirm that absolute personal independence of the individual to work or not to work, to employ or not to employ, is a fundamental principle which should never be questioned or assailed; that upon it depends the security of our whole social fabric and business prosperity, and that employers and workmen should be equally interested in its defense and preservation.

We recognize that there are many opportunities for good in associations of workmen, and while condemning and opposing improper action upon their part, we will aid and assist them in all just and honorable purposes; that while upon fundamental principles it would be useless to confer or arbitrate, there are still many points upon which conferences and arbitrations are perfectly right and proper, and that upon such points it is a manifest duty to take advantage of the opportunities afforded by associations to confer together to the end that strikes, lockouts, and other disturbances may be prevented.

III. All associations of building trade employers, the Real Estate Board, the Illinois State Association of Architects, and the Builders' and Traders' Exchange, shall be entitled to one representative each.

IV. The officers shall be elected at the annual meeting, and shall consist of a president, vice-president, and financial secretary, to hold office for one year, or until their successors are duly qualified.

V. Regular meetings shall be held the first Friday of each month at 2 P.M.

The first regular meeting in June shall be the annual meeting.

Special meetings may be called by the president, or any three members of the Council.

VI. The following standing committees, consisting of three members each, shall be appointed by the president, at the annual meeting, to hold office for one year, or until their successors are appointed.

Credentials—To whom shall be referred all applications for membership.

Safety—Whose duty it shall be to see that ample protection to all is afforded against unlawful interference.

Strikes and Grievances—Whose duty shall be to investigate all strikes and grievances, and report to the Council fully in regard to the same, with such recommendations as they deem necessary.

Arbitration—To whom shall be referred all questions of differences between employers or employees.

Annual Dues—Shall be 25 cents for each member of the various associations belonging to the Council, and assessments may be made upon the same basis of representation.

A committee of three, consisting of H. L. Turner, M. W. Powell and Ed. Kirk, Jr., was appointed to nominate officers, and reported: president, George Tapper; vice-president, H. G. Savage; financial-secretary, F. C. Schoenthaler.

The secretary was instructed to cast a ballot for the ticket as reported, and the officers were declared duly elected.

The chair appointed the following standing committees:

Credentials—J. B. Sullivan, T. C. Diener, A. J. Weckler.

Safety—H. L. Turner, C. B. Kimball, Robt. Vierling.

Strikes and Grievances—P. B. Wight, H. G. Savage, M. W. Powell.

Arbitration—Ed. Kirk, Jr., Wm. Hearson, J. Sutton.

The committee adjourned, and the sub-committee on Strikes and Grievances, upon motion of Mr. Diener, instructed to investigate the present differences between the master masons and the bricklayers and report to the next meeting.

The committee adjourned, to meet June 6.

THE COMMITTEE OF SAFETY.

The Committee of Safety of the Central Council of Building Interests met June 4 and issued the following document:

The Central Council of the Building Interests of Chicago having appointed, among other committees, a committee of safety, whose duty it is to "see that ample protection to all is afforded against unlawful interference," the committee desires to announce to all concerned in the building interests of the city that they are prepared to follow up and prosecute all offenders unlawfully interfering with or intimidating any workman or employer in the legitimate performance of his business.

This announcement was hastened by the publication in the morning papers of an unlawful and unprovoked attack upon peaceable workmen at a job at the corner of Harrison street and Western avenue on Friday, June 3. The committee will promptly investigate any such case when reported to Secretary Schoenthaler at the Builders' and Traders' Exchange, where the committee will be in daily session at two o'clock P.M.

THE ILLINOIS STATE ASSOCIATION OF ARCHITECTS.

The association held its regular monthly meeting June 4, and took up the subject of the labor difficulties in Chicago, before proceeding with regular business. Among those present were Messrs. D. Adler, D. H. Burnham, W. W. Boyington, L. D. Cleveland, S. M. Randolph, Rev. Warren Randolph, of Newport, R. I., W. W. Clay, Alfred Smith, Gregory Vigeant, Norman S. Patton, R. C. Berlin, L. J. Schaub, O. J. Pierce, C. M. Palmer, C. L. Stiles, Samuel A. Treat, John W. Root, Harold M. Hansen, Adolph Druiding, A. M. F. Colton.

President Adler called the meeting to order, and read a letter from the Executive Committee of the Builders' and Traders' Exchange, thanking the association for the stand it had taken upon the present labor troubles. He said that those present knew the demoralized condition into which the building trades have been drifting, because of the leveling process which prevails in trades unions. It was becoming almost impossible to replace good men, because the trades unions arbitrarily prevented the education of a sufficient number of apprentices to replace the good and competent mechanics, who appeared to be rapidly dying out. The difficulty was staring them in the face that soon they would not be able to secure competent mechanical skill at all. It was the architects' duty to assert the right of every American citizen to work at any trade he pleased, without interference from the walking delegate. It was the architects' duty to assist

every young man who desired to learn a trade. There was more at stake in this contest than their own immediate interest as architects—more than the mere stoppage of work or the more or less that might be made during this season. The architects should strengthen the hands of those who were battling for the freedom of American citizens.

Mr. Root offered the following resolution, which was adopted:

Resolved, That the Illinois State Association of Architects heartily indorse the general principles set forth in the recently published "platform and code of principles" adopted by the builders' associations and Real Estate Board of Chicago, and that we will use our utmost endeavors to see that these principles prevail in all building operations in Chicago.

The platform and code of principles adopted by the Conference Committee, the different builders' associations, the Chicago Real Estate Board and the Central Council of the Building Interests was read and indorsed.

Association Notes.

WESTERN ASSOCIATION OF ARCHITECTS.—Convention will be held November 16, 1887, at Cincinnati. J. F. Alexander, La Fayette, Ind., secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Convention will be held the first Tuesday in February, 1888, at Cincinnati. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the first Saturday of every month, at 15 East Washington street, Chicago. Annual meeting first Thursday in October, 1887. Clarence L. Stiles, Chicago, secretary.

INDIANA STATE ASSOCIATION OF ARCHITECTS meets on the fourth Wednesdays of January, April, July and October of each year. Annual meeting fourth Wednesday in October. E. H. Ketcham, Indianapolis, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at Kansas City on the second Tuesday in January, 1888. Charles E. Illsley, St. Louis, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of August, 1887, at Spirit Lake. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 3, 1888. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Wichita on the third Tuesday of January, 1888. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets semi-annually. Next meeting third Thursday in July, 1888, at Cleveland. F. A. Coburn, Cleveland, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets bi-monthly. Annual meeting third Thursday in February, 1888, at Memphis. T. L. Dismukes, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Houston on the third Tuesday of January, 1888. S. A. J. Preston, Austin, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

THE CHICAGO MASTER PLUMBERS' ASSOCIATION meets second and fourth Tuesdays of each month, at 15 East Washington street. J. R. Alcock, secretary. Annual convention of National Association, at Chicago, June 21, 1887.

ASSOCIATION OF OHIO ARCHITECTS.

At a meeting of the Cincinnati Chapter, June 6, an advertisement for competitive plans, issued by the Board of Armory Trustees, was discussed and a resolution passed as follows:

Whereas, The Board of Armory Trustees of Hamilton County, Ohio, have advertised for architects to submit plans, drawings and specifications for an armory in the city of Cincinnati, and as the said Armory Trustees have offered no compensation for such services rendered, nor any premium for meritorious designs, nor appointed an expert jury to pass upon the merits of the same, and have, moreover, limited the time for the preparation of such drawings to the short period of twenty-eight days, and whereas the Cincinnati Chapter of Architects has adopted a code governing competitions,

Resolved, That a committee of five be appointed to present said code for consideration of the Board of Armory Trustees, and to request them to modify their conditions in conformity with the said code, and to give a reasonable amount of time for the preparation of such designs.

And be it further resolved, That a copy of these resolutions be forwarded to the press for publication.

On motion, Architects Jas. W. McLaughlin, Chas. Crapsey, H. E. Siter, Gustave Drach and Lucian F. Plympton were appointed a committee to present the above resolutions to the Board of Armory Trustees.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS.

The efforts of Mr. Thos. Sully, as a member of the committee of the Western Association, for organizing state associations, have resulted in complete success, a Louisiana State Association of Architects having been recently formed. The meeting was held at New Orleans May 4. The officers elected for the year are: Thos. Sully, president; Wm. Fitzner, vice-president; W. C. Williams, secretary and treasurer; S. M. Patton, A. Toledano, B. M. Harrod, J. A. Braun and C. A. Leffingwell, charter members.

The constitution and by-laws are similar to the rules governing other state associations of architects. The membership consists of fellows and honorary members, and the Western Association definition of an architect is accepted by this association. The regular meetings of this association will be held upon the first Wednesdays in May, August, November and

February. The annual meeting will occur in February. The initiation fee of members (fellows) is five dollars; the annual dues five dollars. The schedule of charges as indorsed by the American Institute and the Western Association is adopted as the charges for professional services by this association.

Mr. Sully is deserving of praise for his efforts in forming this state association, which will materially advance the practice of the profession in Louisiana.

WESTERN ASSOCIATION OF ARCHITECTS.

Architect J. F. Alexander, secretary of the Western Association is notifying members that there will be a meeting of the board of directors of the Western Association of Architects, on Saturday, June 18, 1887, at Cincinnati, Ohio. Any members having petitions for the admission of new members or business of any kind to submit to the board of directors for action, will send the same to the secretary's office on or before June 15, 1887. If the work of the association does not progress it will be the fault of the members failing to respond to the circulars, and other active means employed by Mr. Alexander to bring the fast accumulating business of the association to their attention.

CHICAGO ARCHITECTURAL SKETCH CLUB.

The directors of the Chicago Press Club received through Architect John W. Root, from the committee on adjudication for the sketch club, the drawings placed in competition by members for a suitable monument for the press club, premiating one of the designs. The members of the press club are voting on the two best drawings, and the vote will be announced June 12.

Tall Chimneys.

THE following is an extract from a paper read before the Civil and Mechanical Engineers' Society, by Messrs. R. M. and F. J. Bancroft, reported by the *Builders' Weekly Reporter and Engineering Times*, of London, the subject being a chimney built at Lancaster for Messrs. Storey Brothers & Co's White-Cross Street Mills. The engineer was Mr. Edward Storey; architects, Messrs. Paley & Austin; contractor, Mr. C. Baynes; built 1876-7-8, about eighteen months being occupied in its construction. The chimney is octagon brick, with stone cap.

DIMENSIONS.	Feet.	Inches.
Total height, including foundations.....	270	0
Height from ground line to top.....	250	0
Outside measurement at foundation.....	28	0
Inside measurement at foundation.....	17	0
Outside measurement at ground surface.....	25	0
Inside measurement at ground surface.....	17	0
Outside measurement at top.....	10	8
Inside measurement at top.....	9	2

Materials.—Seven hundred and fifty thousand bricks, 650 cubic feet of stone, and 145 cubic yards concrete.

Foundation.—The shaft stands upon a base of concrete, 28 feet square by 5 feet thick.

Bricks.—"Shale" bricks, supplied by the Caton Brick and Tube Company, were used, and were chosen because they are said to absorb less moisture than ordinary bricks.

Internal Shaft.—This is octagonal in form, 264 feet high and 8 feet internal diameter, built 18 inches thick at base and 9 inches at top. It is built parallel to within 12 feet of the top, then sets back 7 inches at each side as shown in diagram 21. The inner shaft carries off the smoke from the steam boilers; it is surrounded by a space or cavity 2 feet 6 inches wide, inclosed by the outer shaft, and the vapors from the stoves, etc., are passed off through this 2 feet 6 inch space. This space between the inner and outer shells is divided into three distinct flues by vertical diaphragms of brickwork, which latter serve to tie the whole structure together.

Outer Shaft.—The brickwork of outer shaft is 4 feet 6 inches thick where it rests on the base, and 14 inches thick at top, about 20 feet from top of chimney; the outside wall curves inward and joins the inside wall, as shown on drawing.

Annular Flue or Cavity.—It will be seen at the junction of the inner and outer shafts two outlets are constructed in each of the eight sides, so as to allow the heated air, vapors, etc., to escape from the annular flue, the principal of which is more fully described under the head of Print Works Chimney, Falls River, U. S. A.

Weight.—Total, 3,300 tons.

Cost.—£2,800 complete.

Deflection and Straightening.—During the erection of this chimney, when it had attained a considerable elevation, it canted out of the perpendicular toward the south 3 feet 10½ inches at top. This was accounted for partly because during the two years occupied in its erection very frequent rains kept the mortar soft on the weather side, the result being that the joints on that side were squeezed rather closer than those on the other, and the stalk heaved or bent over. The principal reason, however, must have been that the foundation was a little weak on the south side, and thus yielded to the pressure, the weight on that side being increased by the deflection of the chimney.

The work of bringing it back plumb was successfully executed by Mr. J. W. Cronshaw, of Blackburn. The operation consisted in cutting out courses of bricks in five different places near the base, on the north side of the chimney, and rather more than half way across. These courses were replaced by ones diminishing very slightly in thickness from south to north, so that the five courses shortened the north side of the chimney sufficiently to bring the axis in a true vertical position. The process of cutting was as follows:

A width of about 18 inches was first cut right through the 4 feet 6 inch brickwork of the outer shell on the extreme north side, a course of bricks being then withdrawn, and the top and bottom joints being thoroughly cleared off. Into this space, 18 inches wide, good hard bricks were then closely packed, these bricks being thinner, as already explained, than those

they replaced. At the outer end good oak wedges were inserted; then similar cuts were made right and left of the first, and similarly treated with bricks and wedges, the work proceeding regularly on each side, east and west, from the north toward the south. As this was done the wedges were gradually withdrawn and the chimney quietly settled over toward the north, until when all the five cuts were completed it had come back to the perpendicular.

The lowest cut was close to the ground, and the highest about 30 feet above. Two of the cuts were continued into the internal shaft.

Our Illustrations.

Suburban residence; M. L. Beers, architect, Chicago.

Residence for V. C. Turner, Chicago; Burnham & Root, architects.

Residence for D. H. Conklin, Decatur, Ill.; H. R. Wilson, architect, Chicago.

Unitarian Chapel, Sioux City, Iowa; Frank L. Wright, architect, Chicago.

Residence at Lewiston, Maine; Henry Ives Cobb and Chas. S. Frost, architects, Chicago.

Greenhouses and Gardener's Lodge for C. C. Collins, Chicago; W. W. Boyington, architect.

Chicago Architectural Sketch Club Competitions—Three-Room Village School, first prize design; A Boat House, first prize design. W. B. Mundie, designer and delineator of both.

PHOTOGRAPHIC PLATES.

(Issued only to subscribers for the Photogravure edition.)

Residence on St. Paul St., Baltimore, Md. J. & W. T. Wilson, architects.

Residence of Frank G. Tullidge, Clifton, O.; Jas. W. McLaughlin, architect, Cincinnati.

Residence of Henry Adams, H. street, Washington, D. C.; H. H. Richardson, architect.

Statue to James A. Garfield, Washington, D. C.; unveiled May 12, 1887; J. Q. A. Ward, sculptor.

Residence of Geo. B. Remick, Woodward avenue, Detroit, Mich.; C. F. & J. A. Schweinfurth, architects, Cleveland, O.

Mosaics.

ARCHITECT JOHN J. KOUHN, a former practitioner in Chicago, but more recently located at Lincoln, Neb., has returned to the city and opened an office in the Insurance Exchange building. Mr. Kohn is a member of the Western Association of Architects.

A LARGE order has just been received by B. D. Washburn, Boston, Mass., for his improved harness and wardrobe hooks. The order has the significant expression: "We shall use these goods altogether, as they are made stronger and neater than the cast hooks."

"It is an ill wind that blows nobody good" is an adage applicable to the general "dullness" that is a feature of architect's offices in Chicago just now. Good use of any spare time could be made by getting perspectives drawn and sending them to us for publication.

THE Harris & Winslow Company, manufacturers of architectural iron and brass-work, has lately been dissolved, the Winslow Bros. purchasing Mr. Harris' interest. The firm will occupy the same premises 99 to 109 West Monroe street and will be known as the Winslow Bros. Co.

IN addition to the many and varied manufactures of sanitary and other goods, already well-known to architects, the J. L. Mott Iron Works have completed largely increased facilities for turning out wrought-iron, brass and bronze railings, gates and art metal-work of all kinds. They are also prepared to give estimates from drawings and specifications, or to furnish special designs. This information comes in the shape of a unique and tastefully printed circular.

A PHILADELPHIA firm, Manly, Cooper & Company, have secured the contract, at Cleveland, for the iron railing for the central viaduct, a big bridge to the south side of the city. The contract involves the use of 600,000 pounds of iron. There were five bids entered, which varied from \$25,500, Manly & Cooper's figures, to \$36,600, and upon motion of the mayor, the lowest bid accepted. The firm are in every way qualified to carry out this or similar contracts, their works being among the largest in the country.

THE Otto gas engine has been before the public for years as a motor power for all manner of small businesses, and has proved a universal success. Why it has not superseded the cumbersome, expensive and dangerous steam engine with builders, it is easier to ask than to answer. There is no danger incurred from explosions or fire with the Otto engine. It occupies little space, having no boiler or smokestack to provide for; can be shifted to any place, and as it runs itself, requires no engineer or attendant, and without, is more economical than any fuel engine, as it automatically regulates its expense, according to the work it has to do.

THE use of granite in the construction of modern buildings is of comparatively recent date. A decade ago its use was hardly noticeable in Chicago. Today one can scarcely find a substantial building that has been built within the past few years that has not more or less in it to give it either strength or ornamentation, or both. To get a comprehensive idea of the rapid growth of this popular stone in the favor of architects and builders one should visit the new establishment of the Minnesota Granite Company near Polk street bridge. There the gigantic character of the granite trade begins to dawn on the beholder. Huge blocks of the stone, ponderous and versatile machinery, among which is to be seen the first

granite-polishing machine erected in the West. The officers of the company are S. P. Ely, president; E. C. Ellis, secretary-treasurer; N. C. Hinsdale, vice-president and general manager, and W. R. Hinsdale, superintendent of construction. The Minnesota Granite Company have made a good beginning for a large trade by securing the granite contract for the new Auditorium.

Synopsis of Building News.

Albion, Ill.—Architects McDonald Bros., of Louisville, Ky., report: Remodeling court house; cost \$15,000.

Ann Arbor, Mich.—Nothing definite has yet been done in regard to the new high school. N. D. Hainman, president of the school board.

Athens, Ill.—Architect George H. Helmle, of Springfield, reports: For Methodist Church Society, frame church, 32 by 50 feet; cost \$2,000, exclusive of stained glass, heating and furniture; Henry Hall, builder.

Augusta, Ga.—Architects Macmurry & Story report: For Dr. W. H. Tutt, suburban frame residence, 76 by 50 feet; cost \$25,000; taking bids. For Jno. I. Cohen, Augusta Opera House, 71 by 144 feet; cost \$30,000; plans in preparation. For Wm. K. Miller, frame dwelling; cost \$5,000; Jesse Thompson & Co., builders. For Judge H. C. Roney, frame dwelling; cost \$4,000; T. J. Daly, builder. For J. W. Alexander, frame building; cost \$4,000; taking bids. For D'Autynao estate, three three-story stores, 25 by 150 feet each; cost \$20,000; taking bids. Richmond county public school, brick and stone school building, 60 by 128 feet; cost \$20,000; ready for bids.

Aurora, Ind.—Architects McDonald Bros., of Louisville, Ky., report: Plans for Odd Fellows' Hall ready for bids; three-story brick, stone and iron building; cost \$15,000.

Birmingham, Ala.—Architects Maury & Haupt, of Louisville, Ky., report: For the Jefferson Building Improvement Co., four two-story residences, 45 by 60 feet, stone, brick and frame, slate and tin roof, closets and baths, stained glass, hardwood finish and tiling, electric bells, speaking tubes, wood or slate mantels; cost \$3,000 to \$5,000 each; under way; F. C. Thompson, contractor. For the Plyson Land Co., the stone and brick buildings for the new water works, 170 by 64 feet; cost \$20,000.

Architect H. Wolters, of Louisville, Ky., reports: Court house, to cost \$125,000. Architects Maury & Haupt, of Louisville, Ky., report: For W. T. Underwood, residence, to cost \$10,000.

Bloomington, Ill.—Architect Warren H. Milner: For J. R. Mason, four-story and basement building, 30 by 80 feet, steam heat, passenger elevator. For a stock company, an opera house, 75 by 135 feet; cost about \$30,000. For the Y. M. C. A., building, 45 by 60 feet; cost about \$10,000. For First Baptist Society, church building, 66 by 115 feet; cost \$25,000. For C. & A. R. R., freight house; to cost about \$15,000. For Grace M. E. Society, church building, 75 by 112 feet; cost \$20,000.

The Congregational people have a goodly sum of money ahead, and have purchased the lot on the northeast corner of Mulberry and East streets, the Murray place, and will erect a \$15,000 edifice.

The Consolidated Tank Line Company will spend about \$10,000 in the erection of a building especially fitted for their work in the oil business. The building will be located near the packing house on land bought from Dr. Schroder.

Mr. Philip Ryan has commenced a business building. It will have a pressed brick front, will be three stories high and cost \$5,000. Mr. Thomas Erwin will erect a three-story brick building, at a cost of about \$6,000. The new city library building, under the superintendence of Mr. George H. Miller, is in process of erection at the corner of Washington and East streets. It will be 60 by 90 feet, three stories high, built of brick and pressed brick, and cost about \$20,000. The German Catholic church, commenced last fall, is being finished up, and will be dedicated soon. The cost of it will be about \$25,000. Messrs. Willard Parritt and J. T. Lillard contemplate building three-story buildings. Mr. A. B. Funk contemplates building a three-story structure on Main street. Mr. John Kuhns will build a double three-story business building. A new school house, of no mean dimensions, will be erected this summer in the Stevensville addition to the city. Mr. W. F. Crane is rebuilding his grocery and dwelling on West Market street. Mr. John Mulherran is building a store building on the corner of Catherine and Locust streets. Mr. Zelleck is building a store building on North Main street. Mr. George Cox is to build an elegant \$10,000 residence on East Grove street. The first story will be of pressed brick and the second story frame. Mr. James Smith builds, on East Jefferson street, an elegant modern dwelling of pressed brick and frame, at a cost of about \$6,000.

Cincinnati, O.—Reported by Mr. Lawrence Mendenhall: The labor difficulties reported last month have come and gone, and an arrangement perfected that will keep business in its proper channel, at least for the season, the only exception to the above being the troubles with the tanners, who demand an increase of twenty per cent to the journeymen's wages. This demand is strenuously opposed by the Master Carpenters' Association, which will submit to no dictation whatever.

The following agreement shows what was done in the strike of the stonecutters, having been drawn up and signed by both committees, binding until May 1, 1888:

CINCINNATI, May 17, 1887.

The Journeymen Stonecutters' Society and the Master Stonecutters' Association of Cincinnati, O., and vicinity, this day enter into contract, the conditions to-wit:

First—The journeymen cutters agree to work the first five days nine hours and eight hours on Saturday, at forty-five cents per hour.

Second—All men now employed in the several shops shall not be interfered with by the journeymen stonecutters.

Third—The hours for starting will be 7 A.M. daily.

Fourth—This agreement shall hold good until May 1, 1888.

JAS. S. ROBINSON,
C. SIMINGER,
JOHN RYNN,
WM. ITTIG,

JOHN BOYLE,
DAVID HUMMEL,
JOSEPH FOSTER,
E. J. DOBBELING.

Com. Journeymen Cutters.

Com. Master S. C. A.

Notwithstanding the resolution adopted by the builders' exchange concerning nine hours as a day's work, some carpenter bosses are making their men work ten, a sign of weakness and a severe injury to the trade, besides being unfair to their companions.

The competitive designs for our centennial exposition buildings were placed on exhibition in our chamber of commerce, and some of them are extremely original. Without going into a description of them, the estimated cost of each may prove interesting: Jas. McLaughlin's plan, \$200,000; H. E. Siter, \$243,000; Chas. Crapsey, two plans, \$163,000 and \$148,000; Saml. Hannaford & Sons, \$230,000; Gustave W. Drach, \$200,000. The prevailing type was cruciform, with open interior courts, with a central dome, the only exception to the rule being that the plan of Mr. Crapsey, which was a quadrangle with an open court.

While it was a disappointment to have an outsider secure the contract for our chamber of commerce, yet Norcross Bros. deserve the thanks of the community for the careful and compact way in which they are building. The firm is using what is known as a "boom derrick," and the writer is not alone when he says that it was his first view of this particular way of building derricks. The granite is being set now, and rapid progress made in all branches of the work.

As a result of the strike, architectural notes are meager, but next month will probably see an improvement.

Architect E. Anderson has completed designs for a picturesque parsonage at Pleasant Ridge, Ohio. He is also engaged on a series of four additional buildings for the city infirmary, consisting of male and female insane wards, colored wards, and a ward for the toilers or working inmates. The buildings average in size 50 by 110 feet, and will be two stories high, of brick. Mr. Anderson is perfectly at home in this kind of work, and these plans only strengthen his reputation.

Wm. A. Lay, fresco artist, has his hands full, being engaged on a church in Springfield, O., and also one in Knoxville, Tenn.

Architects Saml. Hannaford & Sons report the following, the strikes not seeming to affect business in their office: The Newport Car Company will build a stable of brick and stone, two stories, tin roof, and all modern improvements; size 60 by 110 feet. M. M. White, a store building of brick, six stories high; size 26 by 100 feet. Henry Hanna, same class of building and adjoining the same; size 46 by 100 feet. For Chaffield & Woods, a brick storehouse, six stories high; size 80 by 90 feet. For A. C. Horten, a frame dwelling of twelve rooms, hardwood finish, with all conveniences, and slate roof. A frame church at Wyoming, O., with a capacity for 450 people.

Architects Buddemeyer, Plympton & Trowbridge report: For Cohen & Co., warehouse, seven stories, 28 by 82 feet, brick, stone and iron front and rear, tin roof;

cost \$20,000; contract for foundation let. For John Gates, two and a half story half timber, brick, shingle and plaster residence, Oak street, Walnut Hills, 13 rooms including bath and laundry, shingle roof, stained glass, pine finish for varnishing and staining, unique in design; cost about \$11,000; not let. For C. Whiteley, Twenty-fifth ward, Chase avenue, residence, 9 rooms, bath, etc., brick, with plastered gables, slate roof, pine finish, ornate stair window; cost about \$4,500; not let. For Mr. C. H. Downhoff, Twenty-fifth ward, stable, half timber, 20 by 28 feet 6 inches, three stalls, carriage room, man's room, hay loft, etc., shingle or slate roof; cost about \$1,000; not let. Store building for Mr. S. W. Smith, West Sixth street, five stories, brick, with iron front and rear, asphalt roof, 20 by 90 feet; cost about \$10,000; not let. For C. H. Low, Clifton, O., two-room addition to residence, new porches, etc., brick mantel in St. Louis hydraulic pressed brick, hardwood finish, etc., stained glass; cost \$1,650; contractor, Chas. Rosenstiel.

Clarksville, Tenn.—Architects Reid Bros., of Evansville, Ind., report: For Arlington Hotel Co., three-story and basement brick building, 80 by 100 feet, metal roof; cost \$35,000; contract not yet let.

Coldwater, Mich.—Architect M. H. Parker reports: Prospects good, no strikes, all laborers contented and busy. For city of Coldwater, one story brick lock-up 20 by 24 feet; cost \$1,200; Cash M. Brown, builder. State public school laundry, 48 by 54 feet; cost \$3,000; James Carleton and Wm. Drawborough, builders. For Alfred Milner, brick and stone store and hall building, 40 by 80 feet; cost \$5,500; under way; Albert Sherman, builder; also smaller work; under way.

Columbus, Ohio.—Architects Elah Terrell & Co. report: For the Board of Trade, seven-story building, 75 by 187 feet, stone front, galvanized iron cornices, felt roof, iron channels, beams, etc., fireproof, skylights, stained glass, closets, etc., steam heat and power, elevators, hardwood finish and tiling, mantels; cost \$100,000; excavating, contracts not let; the question of electric lighting is not yet settled. For John Joyce, two-story brick and stone residence, 50 by 80 feet; cost \$11,000; under way; M. Fahey, builder. For A. Heffner, two-story brick and stone residence, 40 by 70 feet; cost \$8,000; under way; F. Parker, builder. For H. C. Stanwood, two-story frame dwelling, 40 by 60 feet; cost \$7,000; under way; D. Spencer, builder. For Lee Chamberlin, two-story brick and stone dwelling, 40 by 50 feet; cost \$4,000; under way; J. Hennessy, builder. For H. A. Lanman, two-story brick and stone dwelling, 50 by 70 feet; cost \$10,000; under way; separate contracts. For Walter Zin, two-story brick and stone dwelling, 40 by 70 feet; cost \$6,000; under way; Henderson & Houpt, builders. For D. K. Wilson, two-story brick and stone dwelling, 35 by 70 feet; cost \$6,000; projected. For Mrs. Dennison, three-story brick and stone residence, 50 by 80 feet; cost \$20,000; projected. For F. P. Hills, stone residence, 40 by 70 feet; cost \$3,000; projected. For Kenneth Wood, brick and stone dwelling, 35 by 60 feet; cost \$5,000; under way; Robert Wood, builder. For T. Ewing Miller, five-story brick and stone business block, 32 by 125 feet; cost \$17,000; under way; separate contracts; also four-story brick and stone building, 75 by 100 feet; cost \$16,000; under way; separate contracts. For F. Hubbard, brick and frame dwelling, 40 by 70 feet; cost \$5,000; projected. For Presbyterian Society, church building, 61 by 70 feet; cost \$12,000; under way; separate contracts.

Darion, Ga.—Architects McDonald Bros., of Louisville, Ky., report: Stone, iron and steel jail building; cost \$10,000.

Delaware, Ohio.—Architects Elah, Terrell & Co., of Columbus, report: For Methodist Congregation, brick and stone church building, 96 by 120 feet; cost \$30,000; under way; F. Myers, contractor.

Detroit, Mich.—Present condition and outlook very good.

Architect A. C. Varney reports: For Mr. Kennedy, two two-story stores and dwellings, 38 by 60 feet, brick and stone, gravel roof; cost \$5,000; Bunting and Sigman, builders. For Mr. Rickey, two-story double frame dwelling, 44 by 58 feet; cost \$5,000; J. Brand, builder. For Mr. Hauxhurst, two-story dwelling, 37 by 65 feet, brick and stone, slate roof; cost \$6,800; Wm. Holland & Son, builders.

Architect Gordon W. Lloyd reports: For J. E. Bolles & Co., three-story brick factory building, 60 by 132 feet; cost \$10,000; M. Scholl, mason, J. L. Gearing, carpenter.

C. D. Widman & Co. are erecting a two-story brick factory building, 60 by 230 feet; cost \$9,000.

The Board of Education are erecting a two-story school building, 100 by 40 feet, brick and stone, slate roof; cost \$17,000; Jeynes & Son, contractors; also two-story brick school building, 64 by 48 feet, brick and stone, slate roof; cost \$11,000; Robert Wallace, superintendent.

F. W. Claxon & Co. are building a two-story double dwelling, 39 by 56 feet, brick and stone; cost \$4,500.

Gideon Vivier & Son are erecting two two-story dwellings, 26 by 54 feet, brick and stone, slate roof; cost \$7,000.

Architect H. Eugebert reports: For German Lutheran Society, brick and stone church, 52 by 90 feet; cost \$8,000; W. H. Pocock, builder.

Architects Donaldson & Meier report: For E. J. Smith, two-story dwelling, 34 by 52 feet, brick and stone, slate roof; cost \$7,000; Gideon Vivier & Son, builders. For Geo. L. Fox, two-story dwelling, 37 by 48 feet, brick and stone, slate roof; cost \$4,500; M. Blay & Son, builders.

Architects Spier & Rohns report: For Ramers Park, two-story double dwelling, 32 by 50 feet; brick and stone, gravel roof; cost \$4,500; M. Keller, carpenter; Geo. Nutt, mason.

The Michigan Car Works are erecting a one-story brick car shed, 40 by 400 feet; cost \$3,000.

Architect A. B. Cram reports: For John H. Bissell, three two-story stores and dwellings, 60 by 50 feet, brick and stone; cost \$9,800; Henry Carew, builder.

Architect W. G. Malcomson reports: For E. E. Mann, two-story double dwelling, 47 by 73 feet, brick and stone, slate roof; cost \$7,000; W. H. Holland, builder.

Wm. Houghton is building two two-story stores and dwellings, 40 by 50 feet; cost \$4,000.

Architects Hess & Raseman report: For August Goehel, six two-story dwellings, each 20 by 61 feet, brick and stone; cost \$16,000; Spitzley Bros., builders.

R. J. Wilson is building two one and one half-story frame dwellings, 22 by 48 feet; cost \$2,300.

Architect J. E. Mills reports: For M. A. Adams, two-story dwelling, 30 by 57 feet, brick and stone, slate roof, also barn; cost \$10,000; Tennyson & Co., masons. For Mr. Bassett, two-story dwelling, 30 by 56 feet, brick, stone and tin shingles; cost \$3,500; Morse & Co., carpenters; Dierich Bros., masons.

Jno. R. Gentle is building for B. J. Fayfeta, a two-story store and hall, 40 by 100 feet, brick and stone; cost \$10,000.

Henry George & Son are building a two-story frame dwelling, 26 by 49 feet; cost \$4,000.

Architect Peter Dederichs reports: For Westphalian Brewing Co., two-story brick brewery, 50 by 27 feet; cost \$3,000.

Architects Van Leyen & Preston report: For J. H. Robinson, two-story frame dwelling, 30 by 54 feet; cost \$3,000; J. E. Boomer, mason; Geo. Keeble, carpenter. For Brownell & Co., two-story frame dwelling, 24 by 42 feet; cost \$2,300; Peter Henderson, builder. For C. H. Brownell, two-story frame dwelling, 28 by 42 feet; cost \$3,000. For Wm. F. Knox, one and one half-story frame cottage, 26 by 48 feet; cost \$1,500; Wm. Clifford, builder. For Wm. F. Broadner, two-story frame dwelling, 26 by 44 feet; cost \$2,500. For Cornelius Rafferty, one and one half-story cottage, 26 by 30 feet; cost \$1,400; M. McDonnell & Co., builders.

Architects Scott & Co., report: For Detroit Fire Department, two-story supply house, 28 by 72 feet, brick, slate roof; cost \$6,240; Topping & Fisher, contractors. For Wm. A. Jackson, two-story dwelling, 48 by 80 feet, brick and stone, slate roof; cost \$10,500; Henry Carew, builder.

Jno. R. Gentle is building for Mrs. Minna Duke, three-story dwelling, 27 by 60 feet, brick and stone; cost \$4,000.

Dean Bros. are building for J. H. Cuddy, a two-story double dwelling, 40 by 52 feet, brick and stone; cost \$3,875.

Wm. Glaser is building two two-story frame dwellings, 22 by 58 feet each; cost \$3,000.

Permits were issued during the month of May for new buildings, to cost \$355,790; alterations, etc., to cost \$30,710; total \$386,500.

Duluth, Minn.—Messrs. Swain & Todd are putting in the foundation for a \$15,000 residence for Captain Lewis. Thomas Saxton has commenced work on four dwellings to cost \$7,000. H. B. Moore has commenced work on a residence to cost \$7,000. W. F. Rohback is about to build a residence to cost about \$5,000. M. J. Mullen is about to commence work on a \$5,000 residence. The following are under way: The Spalding House, \$400,000; Elevator H, \$275,000; Elevator I, \$200,000; St. Louis addition, \$100,000; Masonic Temple, \$125,000; Odd Fellows' building,

\$25,000; Congregational church, \$40,000; Duluth National Bank, \$125,000; Steam Forge Works, \$15,000; H. H. Bell's residence on Second street and Sixth avenue east, \$35,000; G. G. Hartley's brick and brownstone, Thirteenth avenue east and Bench street, \$30,000; L. J. Barnes, Fourth street, between Third and Fourth avenues west, \$6,000; J. Lumberg, Tenth avenue east and second street, \$5,000; H. E. Long, four-story brick, Second street, between Second and Third avenues west, \$15,000; George M. Smith, brick dwelling, Fourteenth avenue east and Bench street, \$8,000; E. L. Bradley, Seventh avenue west and Second street, \$5,000; J. G. Williams, Fourth street and Tenth avenue east, \$5,000; H. Nolte, Second street and Twelfth avenue east, \$4,000.

Elkhart Ind.—Architect D. N. Weaver reports: Prospects for a lively boom this season. The Citizens Railway Company are laying two and one-half miles additional track, reaching Highland Park. Among the most important building improvements are the following: James Cornish, three-story brick store room; cost \$6,000; projected. David S. Simonton, three-story brick store; cost \$5,000; projected. A. S. Jones, two-story frame dwelling; cost \$4,500; under way. Otis L. Thompson, two-story frame dwelling; cost \$4,000; under way; S. Daub, builder. H. B. Sykes, two-story frame dwelling; cost \$3,500; projected. Chas. Culmeyer, two-story frame dwelling; cost \$3,000; under way. Chas. A. Strouquest, two-story brick veneer dwelling, 32 by 56 feet, slate roof; cost \$3,500; under way; N. Weaver, builder. Lon. S. Kenyon, frame cottage, 20 by 30 feet; cost \$2,500; projected. Frank E. Thompson, two-story frame dwelling; cost \$2,500. Elkhart Real Estate Association, Park Pavilion, 50 by 120 feet; cost \$2,500; under way; N. Weaver, builder. There are upward of two hundred smaller dwellings, under way and projected. Also a great deal of repair work, additions, etc.

Evansville, Ind.—Architects Reid Bros. report: Contracts on James I. Orr's store building let as follows: Stonework, F. R. Caden; brickwork, Geo. Godge; carpentry and millwork, John S. McColliss; cast-iron, Geo. L. Meaker & Co.; glass, E. C. Johnson. Contracts on J. W. James' office building, let to Henry J. Weiss. (The owner's name was, by mistake, given as James in our May regular edition). Contract let for a ten-room frame residence for G. M. Daussman, to cost \$5,000, to J. T. Rechten.

Architects Reid Bros. report: For G. M. Daussman, two-story frame dwelling, slate roof; cost \$5,500; under way; J. T. Rechten, builder. For H. G. Menks, one-story brick dwelling; cost \$2,500; under way; Ohio Planing Mill Company, builders.

Fort Scott, Kan.—Architect F. A. Grant has prepared plans for the Board of Education for three two-story brick school houses, 52 by 58 feet; cost \$18,500; contracts not let.

Fort Smith, Ark.—Architect Wm. H. Byram reports: The outlook is quite good, and many large buildings are contemplated this season. There is a scarcity of good mechanics.

The following are under way at present: The Fort Smith Opera House, three-stories, 67 by 140 feet, stores in front, brick, tin roof, steam heat, etc. Building alone will cost \$45,000; with site \$80,000; foundation in; J. B. McElpatrick & Son, of St. Louis, architects; Wm. H. Byram, superintendent; N. L. Wickwire, of St. Louis, Mo., contractor; building to be completed by October 1. For Herman Baer, two-story frame dwelling 34 by 50 feet, stone foundation, tin roof; cost \$4,000; under way; Nier, Hogg & Byram, Kansas City, Mo., and Fort Scott, architects; J. R. Stephens, builder. For Geo. H. Lyman, two-story frame dwelling, 32 by 60 feet, stone foundation, tin roof; cost \$4,200; Mr. Ward, contractor; Nier, Hogg & Byram, architects. For Fort Smith and Sebastian county, two-story and basement court house and city hall, 102 by 82 feet, pressed brick, cutstone and terra-cotta trimmings, slate roof, galvanized iron cornice, Rutan system of heating; cost \$52,000; M. J. Brennan, of St. Louis, Mo., contractor. We have recently finished the public school building at a cost of \$30,000. Have projected a brick office and residence building, 20 by 80 feet, for Dr. W. W. Bailey; cost \$5,000.

Fort Wayne, Ind.—Architect H. W. Matson reports: Three-story store building, 51 by 105 feet, Philadelphia pressed brick, cutstone and terra-cotta trimmings, plate and stained glass, elevators; cost \$12,000; plans prepared.

Architects Wing & Mahurin report: For Mace Long and George W. Pixley, five-story stone front business block, 85 by 140 feet; cost \$40,000; one-half now under way.

Frankfort, Ky.—Architects McDonald Bros., of Louisville, report: Brick and stone building for Kentucky Normal School for colored people; cost \$10,000; plans ready for bids.

Architect C. L. Clark, of Louisville, reports: Masonic Hall building to cost \$18,000.

Greenville, Pa.—Architects Kanengeiser & Kling, of Youngstown, Ohio, report: Peter Saul, two-story frame dwelling, 30 by 48 feet; cost \$2,500; projected. For Dr. Martin, two-story frame dwelling, 34 by 48 feet; cost \$4,500; projected. For N. E. Tillotson, two-story frame dwelling, 33 by 50 feet; cost \$5,000; projected.

Huntington, W. Va.—Architect James King reports: Present condition of the building trades good, and outlook favorable for a good season's business. For city of Huntington, two-story and basement pressed brick school building, 118 by 83 feet, stone basement and trimmings, slate roof; cost \$19,000; under way; James F. Hoback, builder. For Mrs. S. Ziegler, two-story stone and brick building, 34 by 63 feet, slate roof; cost \$5,000; under way; Robt. Shore, builder. For Messrs. Fox & Brown, two two-story frame and redwood shingle dwellings, 28 by 50 feet; cost \$1,700 each; under way; Robt. Shore, builder. For Titus & Emmons, block of eight brick and stone, two-story, dwellings; cost \$9,000; under way; Robt. Shore, builder. For T. J. Prichard, M. D., two-story frame dwelling; cost \$2,000. For First Baptist Congregation, frame church building, shingle trimming, stained glass, etc.; cost \$3,000; projected. Robert Shore has the contract for a \$3,000 building for the Huntington fire department.

Hutchinson, Kan.—Architect A. B. Howatt reports: Outlook fair. For G. W. Carpenter, two-story brick livery stable, 50 by 150 feet; cost \$6,000; contract not let. For Young Bros., two-story stone store building, 25 by 100 feet; cost \$7,000; contract not let. For J. R. Price, one and one-half-story frame dwelling, 30 by 48 feet; cost \$2,700; not let. For J. G. Malcolm, M. D., one-story frame cottage, 37 by 57 feet; cost \$2,200; under way; Thompson & Hanna, builders.

Architects Van Brunt & Howe, of Kansas City, Mo., prepared plans for Messrs. Ott & Tewksbury, of Topeka, for a three-story hotel building, 97 by 130 feet, brick, stone trimmings; cost \$50,000; Bowers & Bryan, of Topeka, Kan., contractors, A. B. Howatt, superintendent of construction; building under way; to be completed September 15, 1887.

Kansas City, Mo.—Architect W. F. Hackney reports: For the School Board, two school buildings, to cost about \$40,000 each; also additions to two other buildings, to cost about \$10,000 and \$15,000, respectively. For E. L. Martin, stone residence, to cost \$15,000 to \$20,000. For James Thornton, stone dwelling; cost \$20,000 to \$25,000. For Robert Fullerton, stone residence, to cost \$60,000 to \$75,000. For S. Curkener, brick residence; cost \$8,000. For J. C. Hooper, frame dwelling; cost \$5,000. For John Duvall, frame dwelling; cost \$5,000.

Larned, Kan.—Architects Terry & Thompson, of Wichita, report: For J. V. Moffit and M. W. Levy, hotel, 75 by 110 feet; cost \$30,000; J. V. Majors, contractor.

Little Rock, Ark.—An immense cotton seed oil mill is about to be erected, by southern oil men, in the south end of town, at a cost of \$150,000. Noah Hamlet has the contract for the brickwork, and the Smith-Vaile machinery will be put in.

The "Benjamin" Block is to be repaired and remodeled, and a three-story addition is to be built in the rear; cost \$20,000; H. G. Allis, St. Louis, Mo., owner; Thos. Harding, architect; individual contracts. Mr. Harding has also prepared plans for alterations Lutheran Church, to cost \$15,000.

Louisville, Ky.—Architect D. X. Murphy reports: For H. Bishop, office building, to cost \$24,000.

Architect Henry Wolters reports: Plans in preparation for a depot at Memphis, Tenn., and a court house at Birmingham, Ala.

Architects McDonald Bros. report: Addition to Calvary Church, 60 by 40 feet, stone; cost \$60,000. For Chestnut street Christian Church, 50 by 90 feet, brick, stone trimmings; cost \$15,000. For Third English Lutheran Church, frame Sunday school room; cost \$8,000. For Kentucky University, medical school lecture rooms, etc.; cost \$12,000.

Architects Maury & Haupt report: For Jas. Leech, block of dwellings, 75 by 120 feet; cost \$20,000. For C. Johnson, residence; cost \$6,500. For C. K. Crawford, residence; cost \$7,500. For W. C. Hutchins, residence; cost \$14,000.

Architect Chas. D. Meyer reports: For J. Verhoeff, Jr., brick and stone dwelling; cost \$8,000; Kimball Bros., contractors.

Architect C. A. Curtin reports: Making plans for remodeling Jefferson County Jail building, at Louisville; cost \$7,500.

Architects Maury & Haupt report: McFarren Memorial Church building, 80 by 170 feet, stone, Gothic style, hardwood finish, steam heat, etc.; cost \$100,000. For T. L.

Jefferson, block of dwellings, 200 by 72 feet, stone, pressed brick and terra-cotta, hardwood finish; cost \$42,000. For Chas. Strater, stone and pressed brick residence, 41 by 54 feet, steam heat, hardwood finish; cost \$10,000.

Architects McDonald Bros. report: For Third English Lutheran Church, frame lecture room, 30 by 75 feet; cost \$4,800.

Lyons, Kan.—Architect L. M. Wood, of Topeka, reports: Block of brick stores, 300 by 80 feet; cost \$100,000; plans in preparation; not let. For Butler, Shumway & Co., block of brick stores, 50 by 80 feet; cost \$30,000; plans in preparation; not let. For W. T. Nicholas, office building, 25 by 100 feet; cost \$12,000; plans in preparation; not let.

Macomb, Ill.—Architects Furber & Churchill have prepared plans for the School Board for a school house, to cost \$20,000; building under way, and to be completed November 1.

Mobile, Ala.—Building business is at present at a standstill.

Architect Jas. H. Hutchison reports: For Fred Johnson, two one-story frame cottages, 32 by 60 feet; cost \$4,200; under way. Ferdinand Meyer, one-story frame cottage, 31 by 68 feet; cost \$2,700; taking bids. For Theo. Guesnard, two-story frame double tenement, slate roof; cost \$5,700; under way. J. P. Einrich & Son, builders. For E. G. Draper, two-story frame dwelling; cost \$4,700; Wm. O. Pond & Son, builders. For John W. Black, repairs, etc.; cost \$3,500; Wm. S. Foster, contractor. For Adam Glass, warehouse; cost \$2,200; under way. For P. J. Collins, two-story dwelling; cost \$3,600; taking bids. For F. Meyer, repairs, etc.; cost \$2,500; under way.

Morganville, Ky.—Architects Reid Bros., of Evansville, Ind., report: For National Bank of Union county, brick and terra-cotta bank building, 32 by 65 feet, cost \$6,500; under way; John McCorky, builder.

New Corporations.—The Chicago Edison Company; capital stock, \$500,000; to furnish electric heat, light and power; John M. Clark, John B. Drake and Robert T. Lincoln, incorporators. The New York Corrugating Company, of New York City; capital stock, \$22,000; Henry M. Warren, Lewis Moss and Jas. Gowdy, New York City, and Harlan P. Lloyd, 56 Johnston Building, and L. Lew Sagendorf, Cincinnati, O., incorporators. The Central Electric Company, of Chicago, Ill.; capital stock, \$10,000; M. T. Greene, Geo. A. McKinlock, 38 La Salle street, and Wm. H. McKinlock, incorporators. The Solid Rock Asphalt Company, of Camden, N. J.; capital stock, \$500,000; Thos. T. Tasker, Sr., 921 Arch street; Malcolm Macleod and Edwin N. Velland, all of Philadelphia, Pa., incorporators. The Victor Safe and Lock Company, of Cincinnati, O.; capital stock, \$100,000; Geo. C. McDermott, Thos. S. Spivey, 130 West Ninth street; J. Wm. Johnson, W. W. Dyar, and W. H. Jones, incorporators. The Safety-Latch Door Company, at St. Louis, Mo.; capital stock, \$1,000,000; for the manufacture of automatic elevated doors; incorporators, Henry T. Mudd, Richard D. Thaxton and Henry J. Voe. The Milwaukee Avenue Electrical Company, of Chicago, Ill.; capital stock, \$30,000; Alfred L. Baker, 79 Clark street; Chas. R. Webster and Wm. W. Case, incorporators. The Liberty Brick Manufacturing Company, of Chicago, Ill.; capital stock, \$50,000; Henry M. Brady, Patrick J. Conway and Jacob Semmelhaack, incorporators; Attorney, Edw. Maher, 122 La Salle street. The Shields and Brown Company, of New York City; capital stock, \$25,000; Henry W. Johns, 87 Maiden lane, Fredk. E. Brown, New York City, and Jas. H. Shields, Chicago, Ill., incorporators. The Standard Gas Machine Company, of Chattanooga, Tenn., has been organized with a capital stock of \$100,000; President, John G. Anderson. The Dark Hollow Limestone Company, of Hallowell, Me.; capital stock, \$60,000; President, Jos. R. Bodwell, Hallowell; Treasurer, George Doyle, New York City. Chicago Wire and Iron Company, at Chicago, Ill.; capital stock, \$50,000; incorporators, Eben B. Smith, Frank P. Smith and Willis B. Smith. The American Scint Granite Company, of Saratoga (P. O. Saratoga Springs, N. Y.); capital stock, \$50,000; Scott Barton, Rufus G. Fuller, Horace H. Nye, Stanley H. Bevins and George V. B. Frost, incorporators. The Alsip Brick Company, of Chicago, Ill., has been incorporated; capital stock, \$255,000; Frank Alsip, Wm. H. Alsip, 482 Marshfield ave., and Frank B. Alsip, incorporators. The New York Anderson Pressed-Brick Company, at Chicago, Ill.; capital stock, \$200,000; incorporators, J. C. Anderson, Elisha Gray, S. R. Bingham, F. D. Everett and J. C. Cushman. The Reliance Wire Works Company, Limited, of Milwaukee, Wis., has been incorporated; capital stock, \$20,000; Frank A. Hall, W. N. Fitzgerald and O. F. Lindman, 369 Broadway, incorporators. The Michigan Cement Company, of Milwaukee, Wis., has been incorporated; capital stock, \$300,000; John Johnston, Wm. H. Harding, Wm. E. Sawyer, 319 Prospect avenue, Benj. J. Miller and J. R. Birtleher, incorporators. The Wichita Terra-Cotta Lumber Company, of Wichita, Kan., has been incorporated; capital stock, \$20,000; Amos L. Ranch, Clement T. Meyer, Robert M. Jack, Wm. M. Ranch and others, incorporators. The Converse Heating Company, at Chicago; capital stock, \$10,000; for the manufacture of stoves, furnaces, and heating appliances and apparatus; incorporators, Lyman P. Converse, Peter Fish and E. L. Barber. The Silexin Manufacturing Company, at East St. Louis; capital stock, \$25,000; for the manufacture of silica; incorporators, Arthur M. Read, Charles B. Mason, Henry V. Kent and Nelson C. Robbins. The Brown & James Heating Company, at Chicago; capital stock, \$25,000; for the manufacture of water heaters and furnaces; incorporators, Royal F. Brown, Charles B. James and James B. L. Gascoigne. The Woodland Brownstone Company, of Montclair, N. J., has been incorporated. Capital stock, \$15,000. A. Howard Pelaubet, Newark; Lewis Dawkins and Joseph A. Pelaubet, Bloomfield, incorporators. The Illinois Automatic Door-Bell Company, at Chicago; capital stock, \$10,000; for manufacturing; incorporators, Richard A. Allen, Charles F. Sinclair and A. J. Scarborough. The Chicago Wood Ornamenting Company, at Chicago; capital stock, \$15,000; incorporators, Spencer L. Davis, Edward W. Alleigh and Campbell Allison.

Newton, Kan.—Architect W. L. Ross reports: I will not attempt to describe any buildings at this time as I am not doing much myself at present but expect to put up some good buildings soon. There is quite a building boom here, two fine hotels going up, some six or eight business houses and a number of residences which I am not prepared to describe. This is one of the best towns of its size in Kansas, and bids fair to make a city of considerable importance. I think they claim about nine thousand inhabitants, three weekly newspapers and two dailies, and are arranging for another daily to start soon, three railroads with indications of three more being built to this place this season. Prices of labor fair and each branch is well represented.

Orbissonia, Pa.—Architects Kanengeiser & Kling, of Youngstown, Ohio, report: For J. J. Crowther, two blocks of double frame houses, 28 by 45 feet; cost \$4,000; projected.

Owensboro, Ky.—Architects Reid Bros., of Evansville, Ind., report: Baptist church, Sunday school and class rooms, 39 by 88 feet, two stories, slate roof; cost \$7,500; contracts not let.

Petersburg, Ill.—Architect George H. Helmle, of Springfield, reports: For Miller Aiken, seven-room frame dwelling, 40 by 36 feet; cost \$3,000; projected.

Salt Lake City, Utah.—Architect R. Kletting reports: Outlook promising. For Matt Cullen, five-story and basement hotel building, 153 by 51½ feet, with rear building, 90 by 26 feet, two-stories high, brick, stone front, gravel roof; cost \$100,000; plastering commenced. For L. C. Karick, three-story and basement store and office building, 28 by 100 feet, brick, pressed brick and stone front; cost \$15,000; foundation in. For School District, one-story brick school building, 41 by 64 feet; cost \$3,200; walls up. For L. Post, remodeling two-story residence; cost \$2,000; plans under way.

Sheffield, Ala.—Architects Maury & Haupt, of Louisville, Ky., report: For W. L. Chambers, three-story bank building, 25 by 120 feet, stone, brick and terra-cotta, iron channels, beams, etc., closets and bath, felt roof, hardwood finish and tiling, hot air heat, electric lighting; cost \$15,000; commenced May 15.

St. Louis, Mo.—Building permits issued during the month of May valued at \$55,000, and upwards were as follows: P. Oehler, two-story brick store and dwelling, 36 by 71 feet; cost \$6,000; C. Weiner, builder. A. Cooper, six two-story brick dwellings, 105 by 48 feet; cost \$15,000; A. Cooper, builder. J. Gugerty, two-story dwelling, 22 by 68 feet; cost \$6,000; J. Gugerty, builder. Mrs. M. A. Field, two-story brick dwelling, 22 by 40 feet; cost \$5,000; J. W. Wilson, builder. Miss L. Homer, two-story brick dwelling, 30 by 60 feet; cost \$15,000; Gerhard & Son, builders. D. Houser, two-story brick dwelling, 30 by 60 feet; cost \$15,000; Gerhard & Son, builders. J. D. McLure, two-story brick store and dwelling, 63 by 65 feet; cost \$20,000; F. S. Green, builder. Mrs. E. Gresser, two-story brick flats, 44 by 54 feet; cost \$7,500; sublet. Wm. Renshaw, two-story brick store and dwelling, 75 by 58 feet; cost \$8,000; sublet. Anheuser, Bush Brewing Company, two-story brick warehouse, 97 by 150 feet; cost \$10,000; sublet. Mrs. L. A. McFarland, two-story brick dwelling, 30 by 58 feet; cost \$6,500; sublet. H. Feuerbach, three one-story brick dwellings, 17 by 44 feet; cost \$5,800; C. Johnson, builder. R. S. Brookings, two-story brick dwelling, 44 by 46 feet; cost \$10,000. F. S. Green, builder. F. W. Paramore, two-story brick dwelling, 39 by 44 feet; cost \$5,500; sublet. American Central Insurance Company, alterations to six-story brick building, 46 by 100 feet; cost \$100,000; H. Melburn, builder. Wm. S. Schotten, 50 by 133 feet; cost \$8,000; H. Wuechen, builder. F. W. Paramore, two-story frame dwelling 21 by 42 feet; cost \$9,000; sublet. J. O. Connel, three two-story brick dwellings, 50 by 60 feet; cost \$6,000; M. Conley, builder. R. Stecher, two-story brick cooper shop, 118 by 121 feet; cost \$10,000; B. Webber, builder. F. Yealman, two-story brick dwelling, 24 by 37 feet; cost \$5,000; Chelsman & Kristie, builders. Alton Box Company, two-story brick factory building, 58 by 33 feet; cost \$3,000; sublet. W. F. Stugeson, two-story brick dwelling, 40 by 28 feet; cost \$5,000; J. B. Lindsley & Son, builders. Dr. W. J. Harris, two-story brick dwelling, 30 by 42 feet; cost \$6,000; J. B. Lindsley & Son, builders. H. Campbell, three-story brick warehouse, 28 by 100 feet; cost \$9,000; J. B. Lindsley & Son, builders. J. Martin, two-story brick dwelling, 24 by 61 feet; cost \$8,000; Anderson & Bro., builders. J. E. Kanne, two-story brick dwelling, 44 by 45 feet; cost \$5,000. J. B. Lindsley & Son, six two-story brick dwellings, 66 by 44 feet; cost \$10,000; J. B. Lindsley & Son, builders. D. K. Ferguson, two-story brick dwelling, 28 by 65 feet; cost \$6,500; R. P. McClure, builder. C. E. Nixdorff, two-story brick dwelling, 28 by 24 feet; cost \$6,500; Francisco & Sangumett, builders. J. E. Koch, two-story brick store and dwelling, 37 by 78 feet; cost \$8,000; Klute & Hildebrand, builders. Mrs. S. B. Scudder, four two-story brick tenements, 56 by 44 feet; cost \$5,000; H. E. Fryday, builder. E. V. P. Ritter, two-story brick dwelling, 30 by 45 feet; cost \$6,000; Lester & Halley, builders. M. Deckelmann, two-story brick dwelling, 22 by 67 feet; cost \$6,000; A. Dietz, builder. G. O. Hall, two-story brick dwelling, 23 by 55 feet; cost \$6,000; H. E. Roach, builder. Mrs. F. E. Fisher, two-story brick dwelling, 42 by 50 feet; cost \$6,500; H. Kohlmeier & Son, builders. R. W. Shapleigh, two-story brick dwelling, 30 by 40 feet; cost \$9,000; F. Hallemeier, builder. Urseline Academy, three-story school building, 78 by 57 feet; cost \$14,000; W. C. Papp, builder. Mrs. M. C. Johnson, three-story brick dwelling, 21 by 55 feet; cost \$5,000; A. E. Cook, builder. B. Brontio & Co., two-story brick dwelling, 36 by 60 feet; cost \$7,400; L. Horman, builder. Commercial Building Company, eight-story office building, 127 by 116 feet; cost \$400,000; sublet. Mound City R'y Co., one-story brick shop, 113 by 145 feet; cost \$5,000; J. O. Malley, builder. E. Riecker, two-story brick flats, 25 by 84 feet; cost \$8,000; H. R. Becker, builder. L. W. Bushmann, block of brick dwellings, 71 by 35 feet; cost \$8,000; F. M. Easterday, builder.

[Continued on page xiv.]

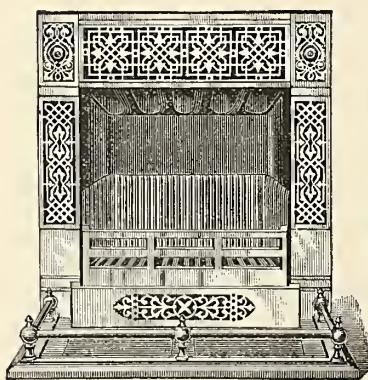
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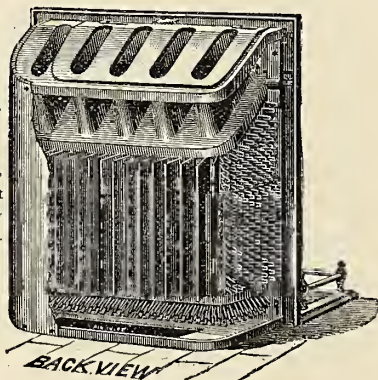
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[Continued from page 86].

South Evanston, Ill.—Architect Otto H. Matz, of Chicago, is preparing plans for E. W. Griffin for a brick and frame residence, to cost \$6,000.

Springfield, Ill.—Architect George H. Helmle reports: Outlook favorable. For George Pasfield, three-story pressed brick and stone store and office building, 47 by 70 feet; cost \$22,000; projected; plans completed. For Leonard Mathies, brick and stone store and flats, 72 by 60 feet; cost \$9,000; under way; Wicks Bros. and Hollings & Son, builders. For Hugo Thoma, three-story pressed brick and stone store building, 25 by 65 feet; cost \$7,000; under way; H. Bettenhaus, builder. For Rosanna Miller, two-story pressed brick and stone store building, 30 by 60 feet; cost \$6,000; J. L. Powell, builder. For Gus. Kuorn, two-story brick and stone store building, 25 by 65 feet; cost \$4,500; projected; drawings completed. For Geo. L. Blood, three-story brick and stone store building, 33 by 60 feet; cost \$4,800; projected; drawings completed. For Thayer & Cappel, two-story addition to woolen mills, 40 by 75 feet; cost \$1,000; E. F. Gehlman, builder. For T. C. Kimber, two-story dwelling, 40 by 40 feet; cost \$6,500; J. L. Powell, builder; heating and wood mantels not yet contracted for. For G. A. Kimber, two-story dwelling, 30 by 32 feet; cost \$2,500; J. C. Whipple, builder. For J. N. Gatten, two-story dwelling, 40 by 40 feet; cost \$3,200; under way; Bush & McKee, builders. For W. C. Sommers, two-story dwelling, 32 by 50 feet; cost \$3,500; J. L. Powell, builder. For Peter Halfen, two-story dwelling, 30 by 48 feet; cost \$2,500; projected; drawings completed. For Board of Education, four-room brick and stone school building; cost \$10,000; projected; drawings completed. Also improvements on old school building; cost \$3,600; day work.

St. Cloud, Minn.—Architect A. E. Hussey reports: For Hon. J. P. Wilson, two and one-half story and basement brick-venered residence, 32 by 70 feet; native pressed brick, shingle roof, hardwood finish; cost \$10,000; under way; H. Husback, superintendent; day work. For First Baptist Church, frame building, with gallery and stone basement, 52 by 76 feet; cost \$8,000; under way; Kopp & Delaney, builders. For school board, First Ward school building, 84 by 69 feet; native brick, granite trimmings, two-stories and basement; Rutman system of heating, ventilating and dry closets; cost \$16,000; under way; Kropp Bros., contractors. For N. Lahr, block of two stories; pressed brick fronts, granite trimmings, two stories high, 42 by 80 feet; cost \$5,000; under way; A. Larson, contractor. For J. E. West, addition, 44 by 120 feet, to four-story hotel, brick-venered; cost \$20,000; carpenter work by the day; A. Larson, brick contractor. For F. R. Bushkirk, two-story frame dwelling; cost \$3,000; under way; John J. Wall, contractor.

St. Paul, Minn.—Architect A. F. Gauger reports: For Mr. Fogelberg, two-story brick veneer building, 28 by 48 feet, Kasota stone; cost \$7,000. For Joseph Harrison, two-story and basement frame dwelling, 32 by 48 feet; cost \$5,000.

Architect J. W. Stevens gives as work being done and to be done by him this season the Model Steam Laundry building, on Sixth and John streets, to cost \$15,000; a residence for Mrs. B. W. Davidson, on Summit avenue near Mackubin, to cost \$20,000; blocks for N. R. Frost, on Western avenue, at \$7,500, and on Fourth street, at \$8,000; residences for S. B. Gault, on Holly avenue, \$10,000; for F. W. Anderson, on Lincoln avenue, \$5,000; for F. D. Hager, on Virginia avenue, \$15,000, with a barn at \$5,000; for Nathan Ford, on Dayton avenue, \$10,000; and one for the architect himself, on Holly avenue, at \$5,000. In addition to this he has under way plans for the new six-story business block of Mr. Mayall, on Jackson street, to cost \$40,000; a like building for DeCoster & Clark, in the same locality, to cost \$40,000; an office for Stone & Morton, on Robert street, \$5,000. The addition to the First Baptist church on Waukouta street, in the form of a chapel, has also been built by Mr. Stevens, at a cost of \$18,000; completed this spring. In the new town or division known as North St. Paul, about which so much has lately been written, Mr. Stevens is planning work to amount to fully \$125,000; this includes a hotel, stores and offices, and dwellings.

Architects Wilcox & Johnston, the central building of Macalester College, corner Summit and Snelling avenues, to cost \$35,000; the city and county hospital, two pavilions fronting Jefferson boulevard, brick and stone; cost \$50,000. Additions to Van Buren school, Dayton's Bluff, brick, stone trimmings, eight school rooms; cost \$29,500. Residence A. H. Wilder, Tiffany brick and brownstone; cost \$50,000. Residence T. L. Schurmeier, Crocus Hill, Chicago pressed brick and brownstone. Residence R. R. Dorr, Crocus Hill, stone and brick; cost \$20,000. Residence J. T. McMillan, Wabasha Hill, brick and brownstone; cost \$15,000. Residence George C. Stone, Central park, brick and brownstone; cost \$27,000. Residence Messrs. Bement and Cary, Central park, brick and brownstone; cost \$18,000. Residence R. B. Wheeler, corner Avon and Summit avenues. Residence Mrs. Campbell, corner Prospect and Vine streets, frame; cost \$8,000. Residence G. O. Nettleton, Pleasant avenue frame; cost \$8,500. Block of residences for William C. Riley, brick and brownstone, corner Nina and Laurel avenues; cost \$60,000. Block of residences for Dr. Wharton, Tenth street near Jackson, brick and stone; cost \$20,000. At the corner of Dayton and Virginia avenues "The Aberdeen" is to be erected, seven-stories high and basement, fireproof, red sandstone and brick. The apartments will be fitted up with every modern convenience, strict attention to ventilation will be paid, heated throughout by steam and lighted by both gas and electricity. There will be many balconies projecting from the stories above the first and upon the roof, which will be tiled.

Architect H. S. Treherne is busy at work upon the plans for combined club house, apartment building, natatorium and cavalry headquarters. It will be about 300 by 150

feet in size, a part of it three and a part five stories in height; the total cost of the building alone will be about \$250,000. It will not commence before fall.

Architect E. S. Radcliff has under way a residence for F. J. Schultz on Grant street, near the residence of William R. Merriam, to cost \$16,000; one for Adam Worley, in West St. Paul, to cost \$6,000; another for J. P. Hawley, on Portland avenue, to cost \$7,000; one for Thomas Riley, on Laurel avenue, to cost \$12,000; and one for W. B. Banks to cost about \$10,000. He is also preparing plans for a block of ten tenements for Mr. Banks to cost \$30,000, and for a block of stores at Merriam Park to cost \$12,000, to be owned by Chamberlain & Brainerd.

Architect D. W. Millard: A block for H. H. Herbst on Chestnut and West Seventh, to cost \$6,500; a residence on Holly avenue for M. G. Brown, to cost \$8,000; another on Grand avenue, for L. T. Lawton, \$8,000.

Architects Hodgson & Stem: An apartment building at the corner of Tenth and St. Peter, built by J. R. McMurrin; it will be five stories high, of stone and brick, the first floor to be devoted to stores, the remainder to apartments; each apartment will contain from eight to ten rooms. There will be a regular steam heating and electric service throughout; the cost will be \$125,000. For E. Felderhauser, fifteen houses, built of brick, stone and terra-cotta, with tile roofs; the court formed by the houses will be fitted up as a park; a central plant will furnish steam heating and electric lighting; the total cost will be \$135,000. Three houses are to be built for the same party on Nelson avenue at \$15,000. For J. R. McMurrin, residence at St. Anthony Park, \$25,000. Tenement houses for J. P. Gribben and J. J. Watson, \$20,000; residences for themselves at Holly and Kent, \$14,000. A block for J. R. McMurrin at \$25,000. The Como Hotel and Club House, \$25,000. Four houses for McClung & McMurrin, on Langford and Breda avenues, \$20,000. Residences, for J. J. McCarty at Dayton and Kent, \$8,000; for H. P. Ragg, on Summit, between Selby and Nina, \$30,000; for A. B. Wilgus, West St. Paul, \$8,000; for F. S. Kirkpatrick, on Holly avenue, \$7,000.

Architects Wirth & Haas: Central Park Methodist church will be a notable one. It is being built at the corner of Minnesota and Twelfth streets, of Dresbach stone, with a foundation of Bayfield sandstone. The cost of the building alone will be \$45,000, the total cost of the completed structure, with all the furnishings, \$80,000. The firm has also been building the Esby block on Fourth street, a fine building of Kettle river sandstone, with Bayfield trimmings and attractive carving. The cost is about \$20,000. Among the other buildings by this firm are: A residence for Fred S. Bryant on Portland avenue, \$6,000; one for Samuel Magoffin on Summit avenue, to cost \$15,000; a residence for Mr. Bishop on Summit avenue, to cost \$12,000; a residence at Hamline for George H. Hazzard, to cost \$10,000, and other buildings of less value in different parts of the city.

Architects Hamilton, Zschocke & Turner: Block of stores and flats, Concord street, for W. Berlandi, \$20,000; German Catholic church, Robie and Hall, \$16,500; block of three houses on Exchange street for W. Barteau, \$15,000; residence for Jacob Hammer on Franklin street, two stories and basement, \$7,000; five school houses for the city of South St. Paul, \$4,000 each; warehouse for Griggs Bros. on Fillmore avenue, \$12,000; double store building for Whitwell Bros. on Lucas street, \$12,000; three-story double stores and flats for Mr. Highhouse on Dakota avenue, \$13,500; residence on St. Anthony Hill, cost \$15,000; ten houses for Paul Martin, West St. Paul, cost \$15,500 each.

Topeka, Kan.—Contracts for stone, iron and brickwork on the central building of the Kansas State Capitol will be let June. McDonald Bros., architects, Louisville, Ky., or Secretary of State, Topeka, may be addressed.

Warren, Ohio.—Architects Kanegiser & Kling, of Youngstown, report: For J. M. Thurman, two-story brick store building, 20 by 70 feet; projected; cost not estimated.

Watertown, Minn.—Architect H. G. Carter, of St. Paul, reports: Brick and stone opera house building; cost \$20,000; work to commence at once.

Wichita, Kan.—Architects Terry & Thompson, report: For J. C. Mossman, two two-story frame dwellings; cost \$5,000; G. W. Loser and J. S. Moad, builders. For Joseph Mossbacher, two-story frame dwelling; cost \$7,000; H. W. Finch, builder. For M. L. Garver, two-story brick dwelling; cost \$9,000; Jackson & Plank, builders. For A. W. Bitting, two-story brick dwelling; cost \$15,000; sublet. For M. P. Barnes & Son, three-story business block, brick and cutstone, 100 by 110 feet; cost \$30,000; sublet. For J. A. Jones, two-story frame dwelling; cost \$6,000. For G. M. Boyd, two-story frame dwelling; cost \$6,000; day work. For Mrs. C. A. Fitzgerald, two-story frame dwelling; cost \$5,500; J. A. Nixon, builder. For Finlay Ross, two-story brick dwelling; cost \$9,000; J. S. Moad, builder. For Dr. Wm. A. Jordan, two-story frame dwelling; cost \$5,000; sublet. For Wm. Fletcher, two-story brick dwelling; cost \$11,000. For Wm. Fletcher, four-story office building, 50 by 140 feet; brick and cutstone; cost \$60,000; sublet. For Baughman & Fruman, two-story hack barn, 75 by 120 feet; brick and cutstone; cost \$15,000; sublet. For Schweiter & Mossbacher, three-story brick business block, 75 by 110 feet; cost \$25,000. For J. R. Snively, two-story frame dwelling; cost \$7,000. For Arthur Lefevre, two-story frame dwelling; cost \$4,000; J. A. Nixon, builder. For Midland R. R. Co., two frame dwellings; cost \$3,000; Whitcomb & White, builders. For O. D. Kirk, two-story frame dwelling; cost \$6,000. For Fred Smith, two-story frame dwelling; cost \$2,500. For Mr. Bruggemann, two-story frame dwelling; cost \$2,500. For J. C. Bentley, two-story frame dwelling; cost \$10,000.

Wyandotte, Mich.—Architects Van Leyen & Preston, of Detroit, report: For Wm. Smith, two-story frame dwelling, 29 by 52 feet; cost \$5,000.



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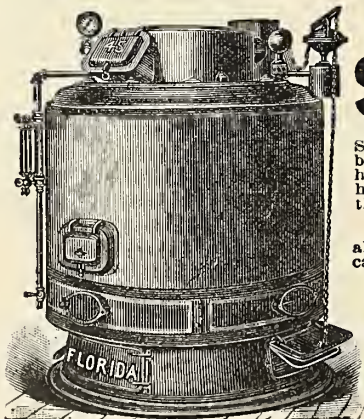
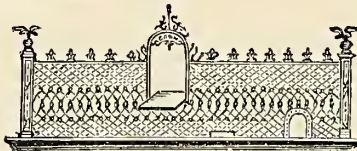
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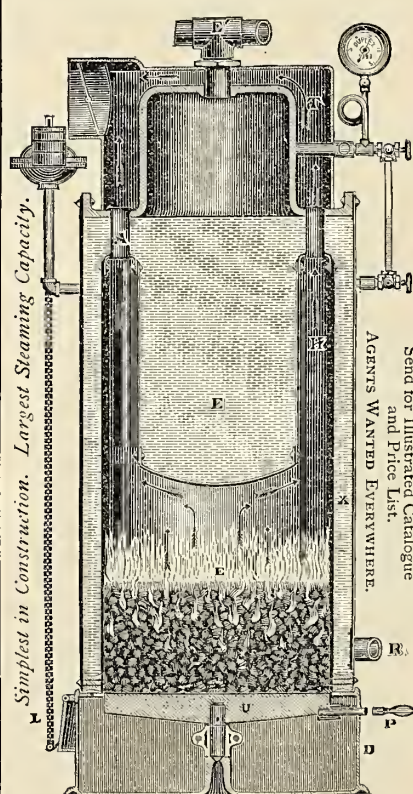


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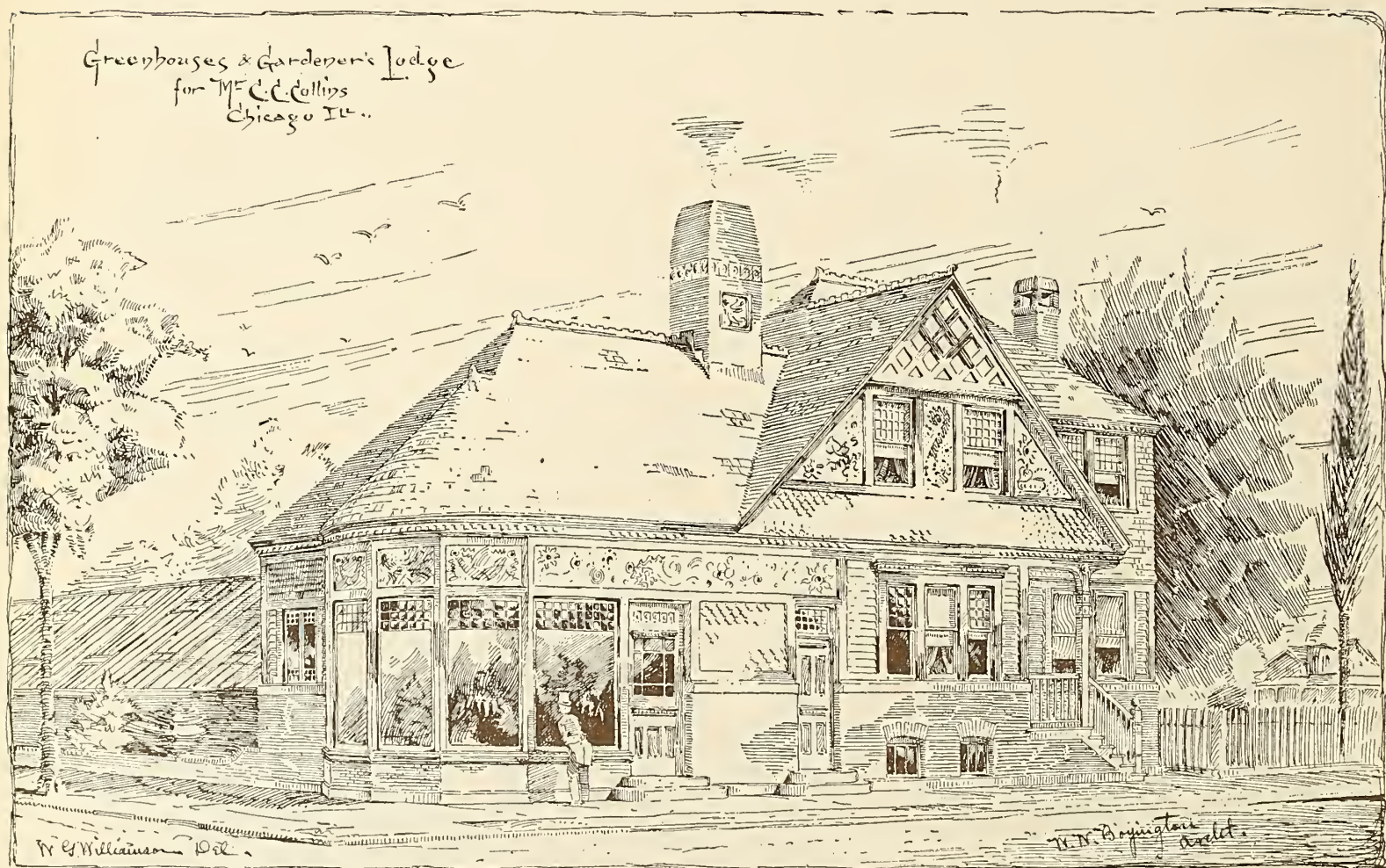
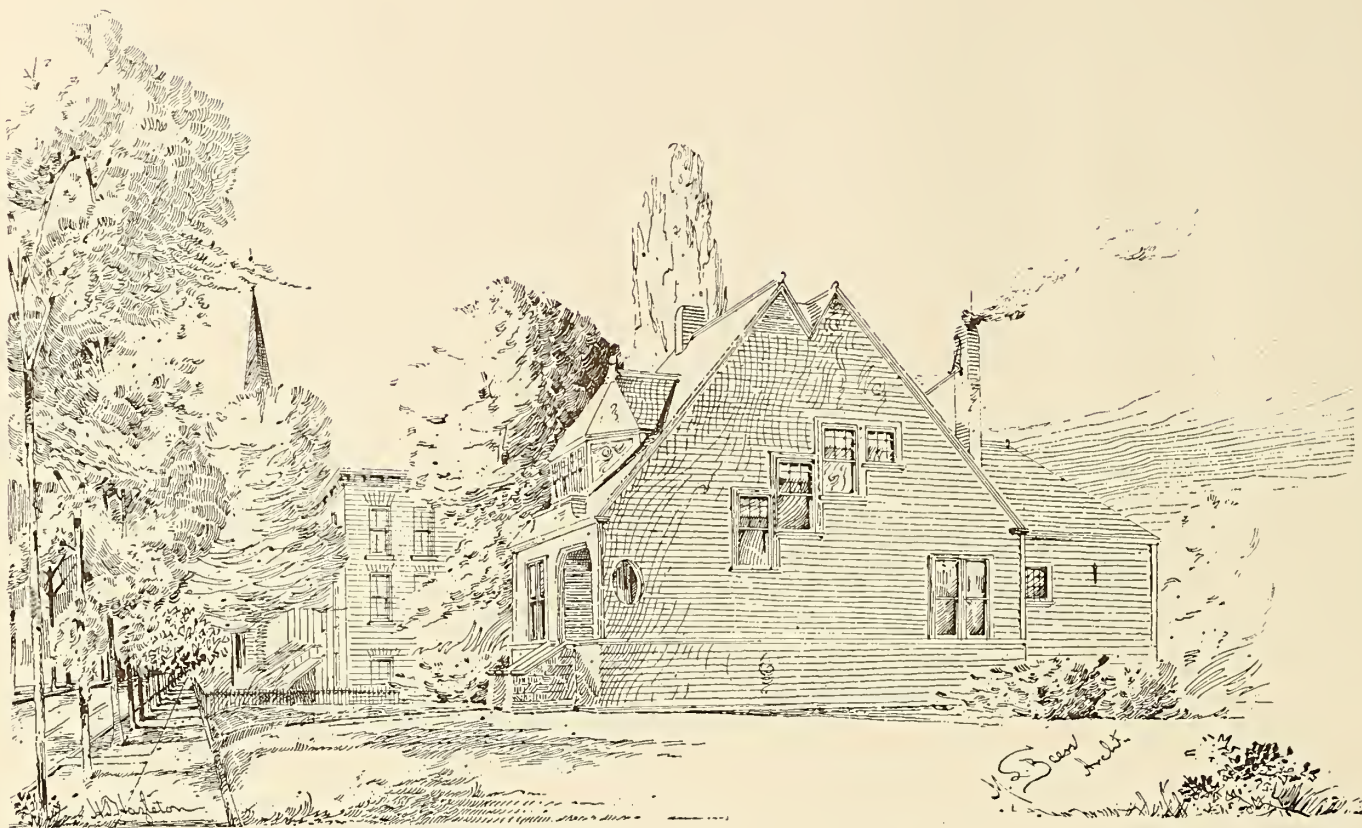


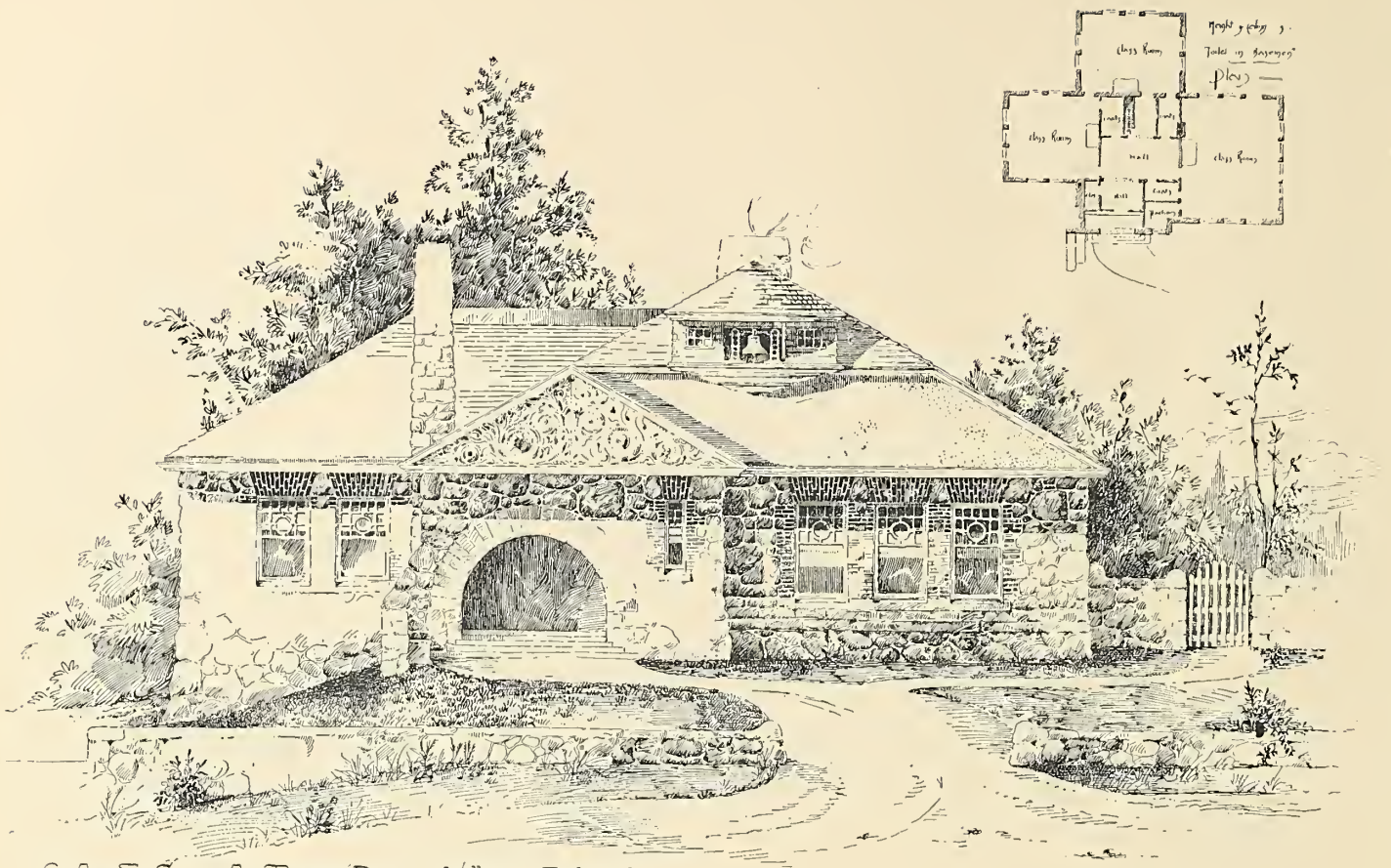
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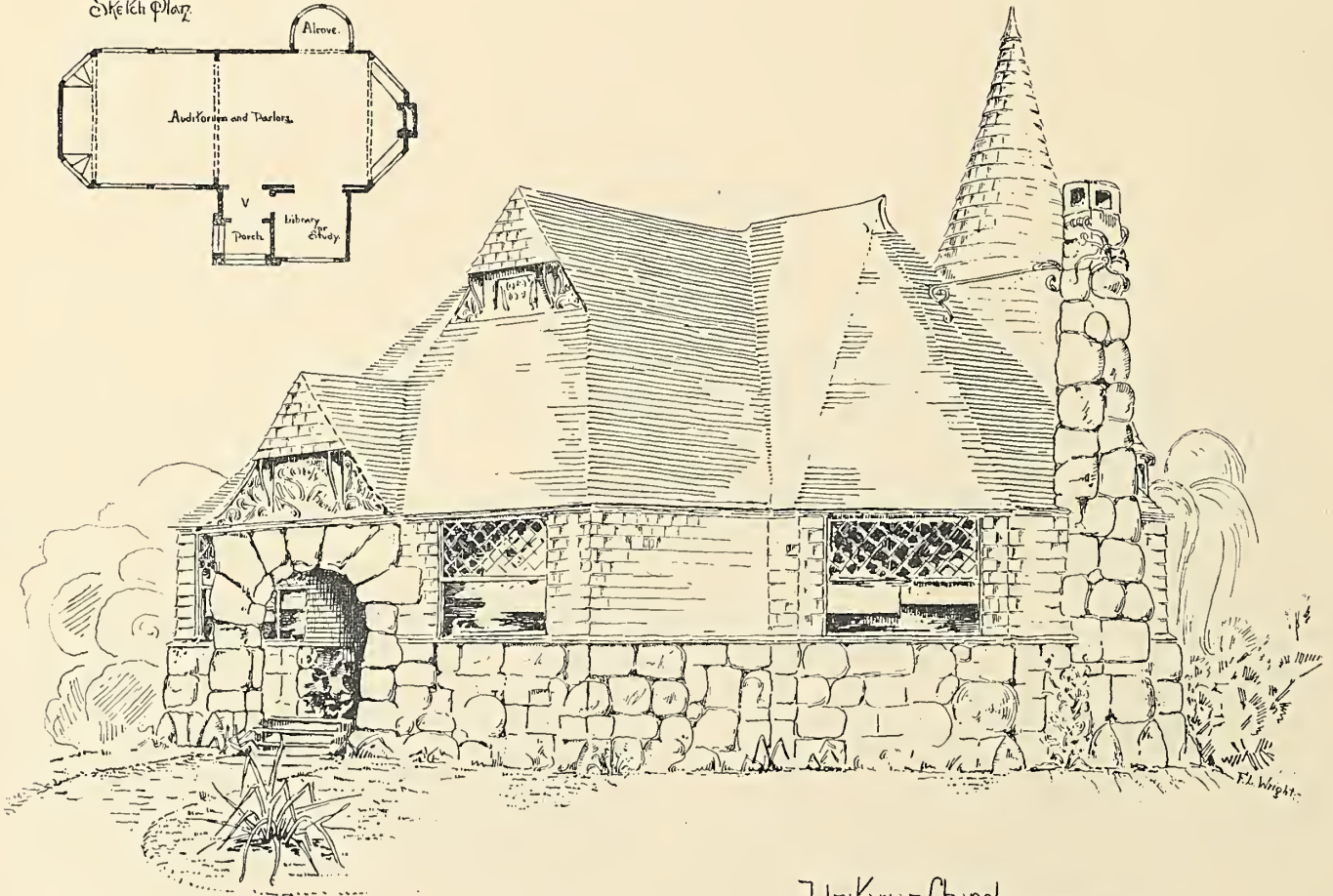
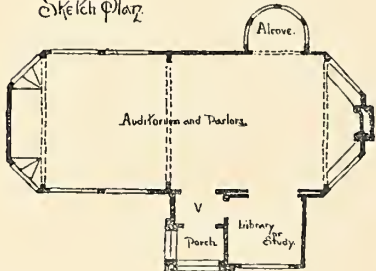
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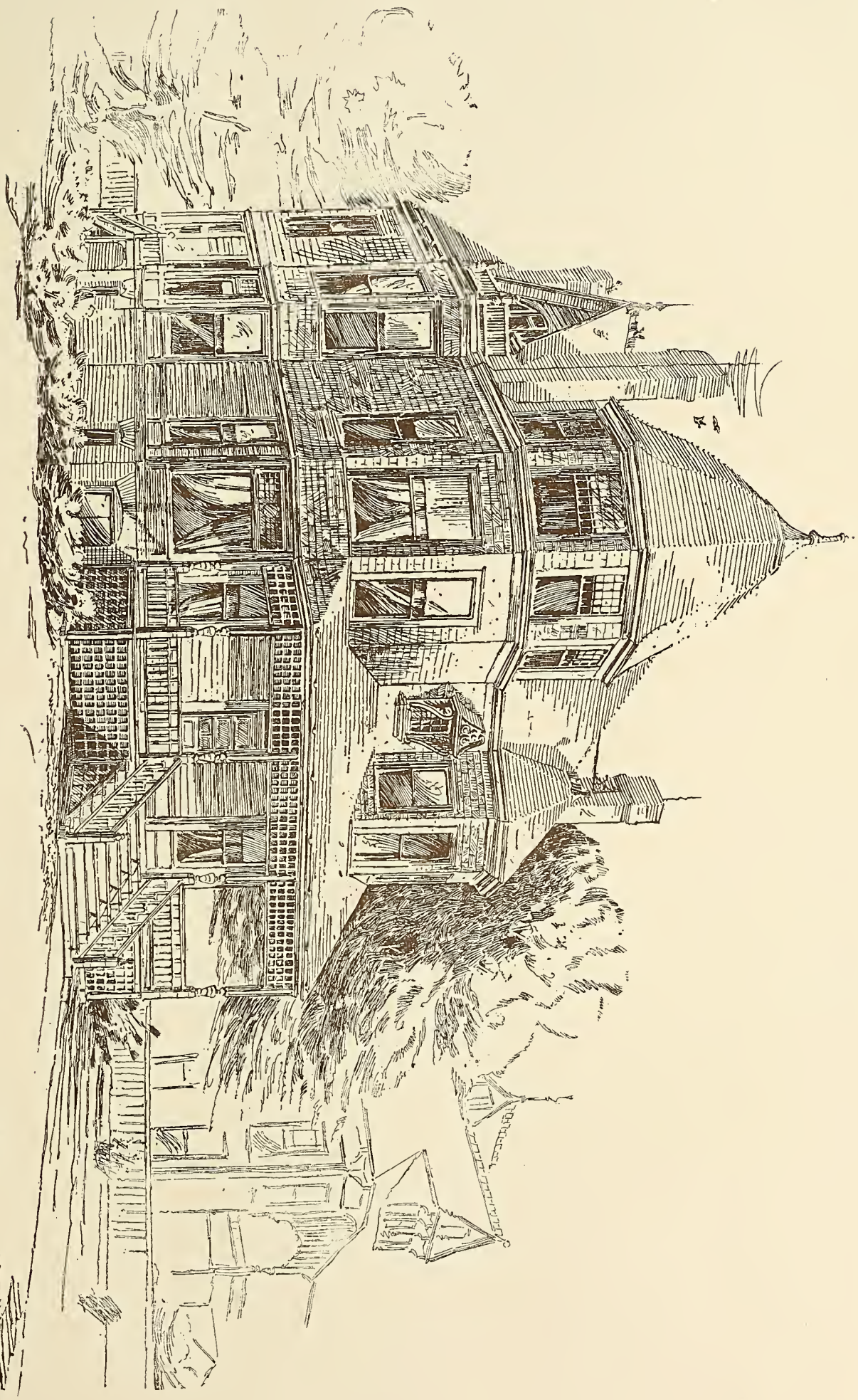


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"Truant" W.B. Wendie
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Sketch Plan.



Unitarian Chapel
for Sioux City, Iowa
Frank L. Wright, Archt.
Chicago 1911

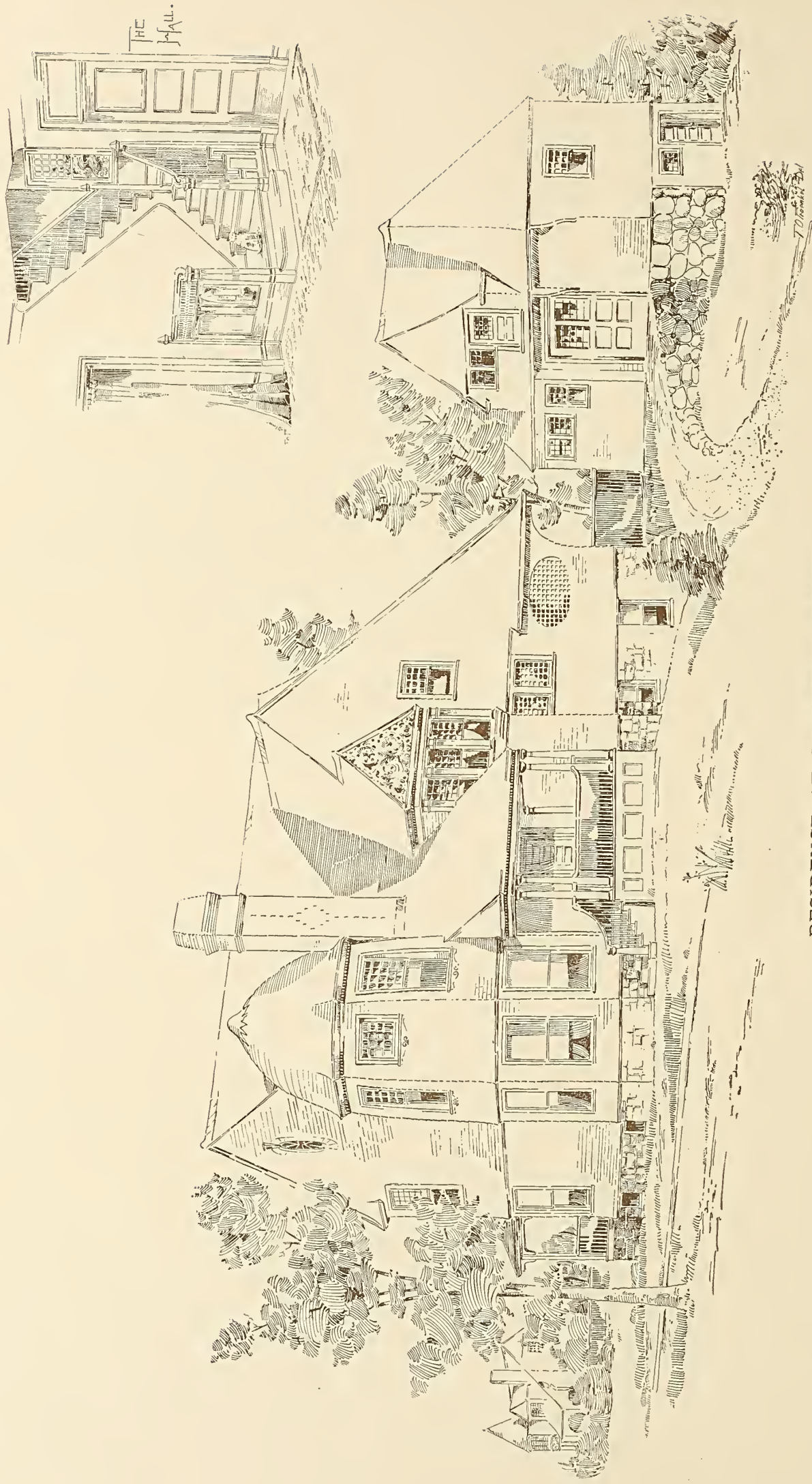


McClintock Architect

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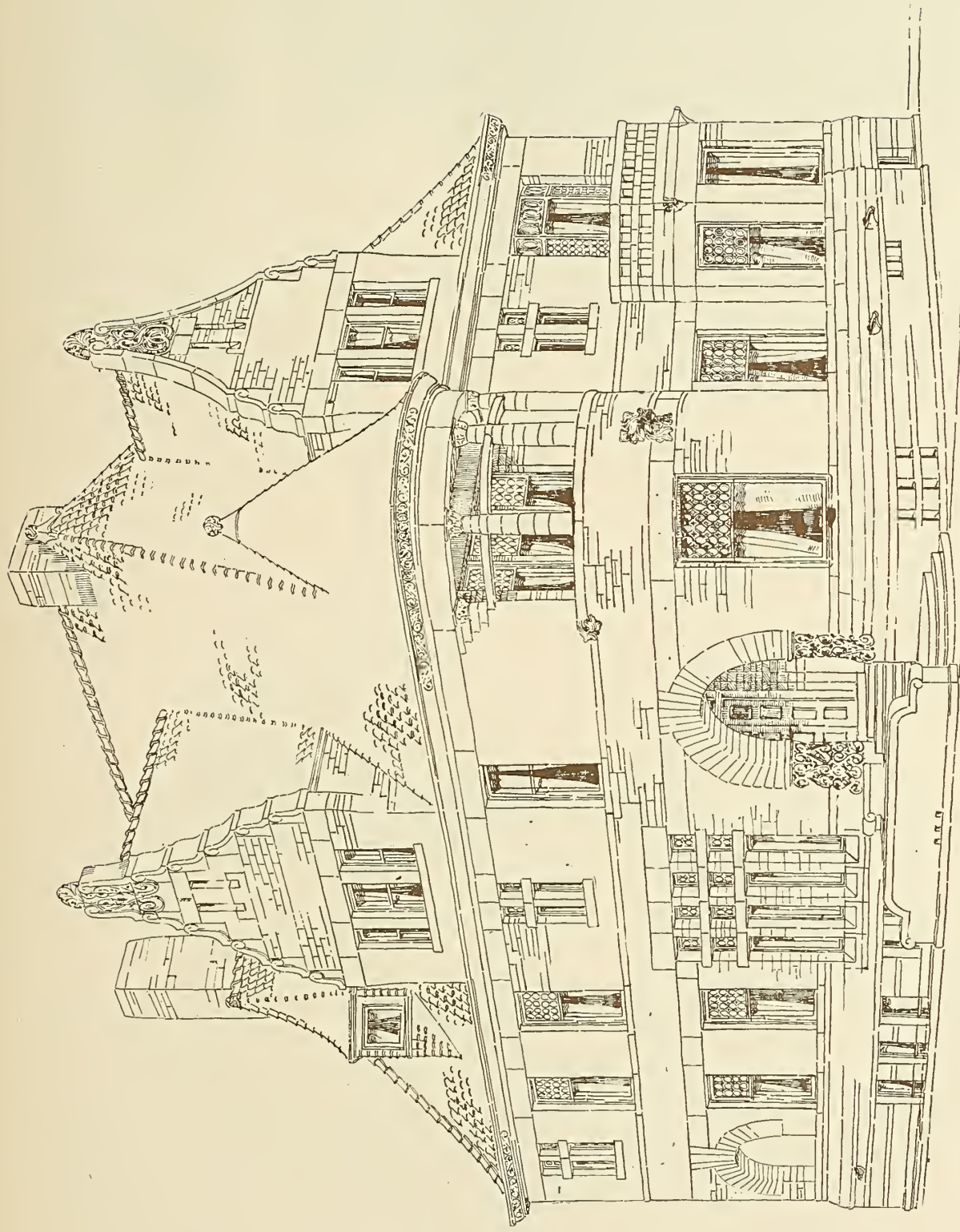
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A MONTHLY JOURNAL (WITH AN INTERMEDIATE NEWS NUMBER AND A PHOTO-GRVURE EDITION) DEVOTED TO WESTERN INTERESTS.

VOL. IX.

CHICAGO, JUNE, 1887.

No. 9

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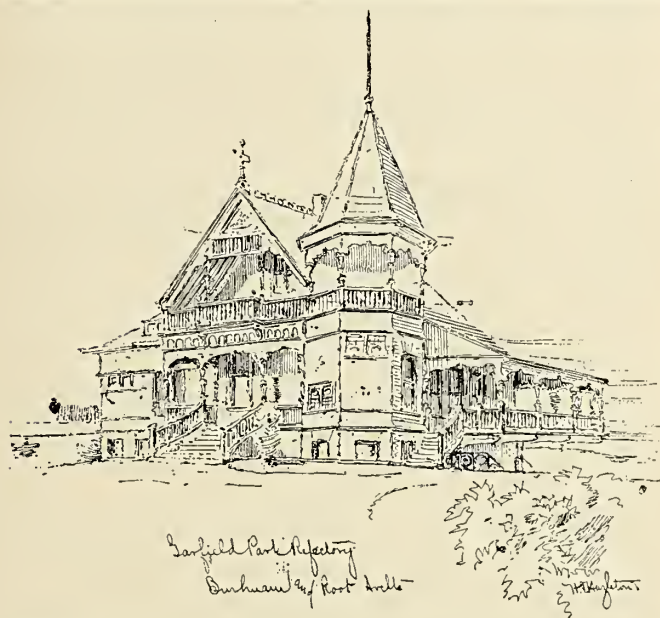
DEVOTED TO

ASSOCIATION AND BUILDING NEWS.

PUBLISHED BY

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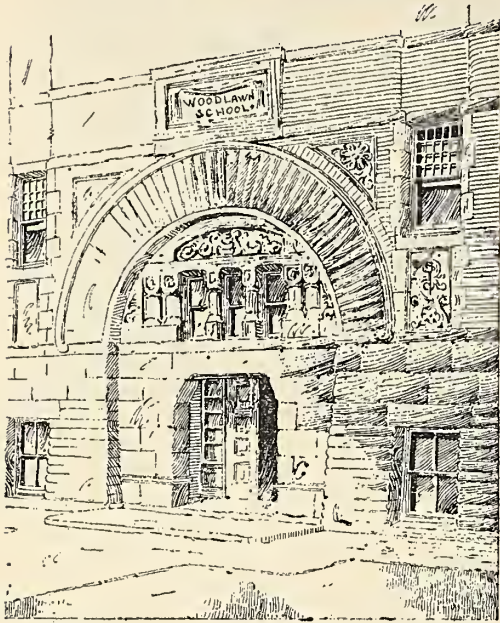
THE situation in Chicago remains much the same as upon the date of our last issue, as far as the action of the contractors is concerned. The code of principles were laid down as a line of action; all interested in the building progress of the city have indorsed them, and no work has progressed except according to their provisions. There is no disposition manifested in any department to depart from this line of action. They have been reaffirmed in some instances, and added strength has been received by their indorsement by the political committee of one of the leading clubs composed of business men. On the other hand, the unions have materially weakened in the false position assumed, and so long occupied by them. The bricklayers' union has gradually disintegrated, until contractors are able to secure almost all the labor in this department they require for the completion of contracts left in their hands. The carpenters have found that there is a large surplus unemployed in their trade who are ready and anxious to go to work, independent of any union. They attempted some resistance when the nine-hour

rule of the association went into effect June 13, but the firm stand that is always taken by this, the most united association among the building trades of Chicago, averted the slightest approach to trouble. The effect is, that within the coming two weeks the masons' union will be powerless, and their interference gone. The rule of other unions will not deter the general resumption of work. In looking forward to this we feel that the journeymen will owe a large amount of gratitude to those who have so persistently fought for their emancipation from union rule, and in the triumph of personal freedom against brute force.

THE latest important moves made by the Master Masons' Association and the bricklayers' union is the formation of a new union of journeymen, at the instigation of the master masons, upon broad and sound principles, followed by the repeal of the demand for a Saturday pay day by the union. This, it will be claimed by the union leaders, should settle the controversy, but the attempt to place the difficulty in a false light will not succeed, as the general public are too well informed upon the real issue to be deceived. No bricklayer will be engaged to work until he personally assents to the principles enunciated, and no union will be treated with, or receive consideration, while the articles of its constitution and by-laws contain any provision or rule antagonistic to those principles. The strength of the entire movement against the arbitrary action by men or union seeking to abridge personal freedom is in the broad and just character of the principles, and this line of right, so well established and adhered to, must be maintained, and when union opposition ceases, not infringed upon.

THE National Association of Master Plumbers of the United States held the fifth annual convention in Chicago June 21, 22 and 23. The principal subjects discussed were the apprenticeship question, trade schools, and the attitude which associations should sustain in regard to manufacturers of plumbing goods. These questions we will discuss, and also give a general report of the proceedings in our July issue. The officers elected were: President, John Byrns, of New York; recording secretary, H. G. Gabay, of New York; first vice-president, John Trainor, of Baltimore; treasurer, M. J. Lyons, of Brooklyn; corresponding secretary, Walter T. Hudson, of Brooklyn; financial secretary, Enoch Remick, of Philadelphia. The delegates were 173 in number, representing 21 states and about 40 cities, and represented a constituency of 1,359 master plumbers. The convention adjourned to meet next year at Boston, Mass.

Illinois State Association of Architects.



At the regular meeting of the association, June 4, President Adler occupied the chair. Among the visitors was the Reverend Warren Randolph, of Newport, R. I., brother of Architect S. M. Randolph.

After transacting other business, the symposium appointed for this meeting was taken up, the subject being, "What are some of the Architectural Possibilities of such Materials as Paper, Glass, etc.?" Architect D. H. Burnham led the discussion.

D. H. BURNHAM.

When the model cheap house shall be finally evolved it is probable that paper will enter largely into its construction. We use the material already for outside weathering and for insulation. It has become standard wall decoration in the house; it often keeps out the cold of winter and the heat of summer; in floors, it cuts off the passage of sound, and no material better serves for ice-room walls. These uses are a beginning, but they are little more than suggestions of what will follow.

If fastest passenger trains thunder across the continent on paper wheels, exposed to storms, winds and changes of temperature, why may not the same material easily lend itself to statical conditions of our houses? While already used for siding, it seems not to have been thought of for shingles, floorings, architraves, and many kinds of constructive ornament; yet no other composition has been found which, in reality, can so fully meet the needs of a poor cottager, who, though empty of pocket, may yet be sensitive to color and form as any idle Midas. It will stand the climate under even the severest tests, and will scarcely need painting more than pine, though, like that noble material and friend of man, when one chooses it can be decorated to the designer's fancy. It can be molded, stamped, cut, nailed and handled more easily than anything we now have.

As in exterior use, so within; each part may be paper; and sometimes the walls and ceilings, plain or ornamented in relief, the bases, the architraves, the mantels, even the doors themselves, will be made of paper.

A most attractive subject for a draftsman's competition this, namely, "A Workman's Cottage. Show how much of it one can make of paper. Detail the construction, that we may know how the parts are to be put together and be fastened in place. Remember that paper, like wood, may be treated with paints for ornament or preservation."

Surely, if they be needed, manufactories will soon spring up, equipped to fill this need, and it may not be much to hope that, in our time, we may be able, by means of paper, to more quickly and cheaply supply the common people with houses suitable to the wage-working class and those of scanty fortune.

Glass. The crushing weight for glass is more than for granite, and for either plain or polished work it can be more cheaply produced. Why, then, is it not used where we now employ both granite and marble? for it is obviously a good building material. Like terra-cotta, it always was the best for certain work; and like the latter, it has been neglected for centuries, until modern necessities now demand its liberal use.

Besides being used in windows, glass was otherwise employed in buildings many centuries ago. It was used in rich mosaics on walls and ceilings by many peoples and in many places. It was cast into ornamental plates, and so formed entire interior wall surfaces of houses, but nowhere has it been valued at its true worth for architectural treatment. But its great adaptability, and the surety of its being cheaply produced, must arrest attention ere long, and it is probably reserved for us here, in the birthplace of so much that is new in our art, also to create a glass style that shall be better adapted to some of our needs, and be more beautiful than any known before. Like paper, it will lend itself to quick cleanliness of construction, and, together with paper, it may help us to altogether dispense with plaster. We may live to see many a building built of glass from grade to roof-tree, the walls, the ornaments, the gutters, the ridges, the tiles, the chimneys—in short, the whole exteriors. Nor will its use stop here; for why may it not become the best of partitions, ceilings, stairs, balustrades, fireplaces and baths?

Not terra-cotta itself may be more cheaply or rapidly furnished; for the constant and long attention to the terra-cotta kilns will not be necessary for easily melted glass. Imagine the joy of that designer to whom will surely sometime come the laconic man of facts and figures, holding out a pamphlet announcing that he will furnish annealed glass of any size or quality, solid or hollow, plain or ornamented, opaque, translucent or transparent, dull or polished, and of any color, tint or mixture known to art or nature. Imagine a ruddy dwelling built of this, and seen under the rays of a setting sun, with its glowing walls, rich with the penetrating depth of jasper stone; with crests and turrets softly melting against the evening sky,

so that one may well doubt where a crimson cloud leaves off and the roof-line of the house begins. A house not having cold stone surfaces, but like the quality of pigments just spread upon an artist's palette; a house whose entrance-way shall still be red browns on iridescent walls, polished ceilings and dull-tinted floors; whose rosy boudoir and opalescent morning room shall be pure, dreamy and liquid as the heart of a pearly shell lapped by the waves at evening.

S. M. RANDOLPH.

The development of paper and glass has done much toward making possible the construction of a perfect building for habitation in this climate, where artificial heat is required for comfort during several months of each year.

It is well-known to those who have camped out that little or no danger is experienced from currents of air while living in open tents; the same persons find a different state of things when they return to life in substantial buildings; here a continual war of the elements is waged, the heavy atmosphere of the outside rushing in at every crevice to force out the lighter air as it is warmed and rarefied; this action produces what are familiarly called drafts, so dreaded by persons of comparatively little vitality.

In ordinary brick dwellings it is easy to find the cold air rushing in through the apertures between masonry and woodwork on all sides of window and door frames, for no matter how carefully they may have been joined the joint will soon be opened; it is not, perhaps, so well known that a current of air can often be found passing through the masonry and between the floor joist sufficient to blow out the flame of a candle. To remedy these defects, pieces of joisting should be fitted and nailed in close against the brickwork, and before the furrings are put on the walls should be entirely covered or lined with heavy, inodorous, waterproof paper, passing it over on to the woodwork of the window and door frames and back on the lower side of the joists overhead; if paper be continued across the ceilings and across furring for lathing placed below it the room will be found almost air-tight, and ridges of smoke and dust will not form on the ceilings, for they are caused by the air passing through the plastering, which acts as a filter and resists the passage of these atoms.

A liberal use of glass is also necessary for construction of the model room in which to sustain life. Abundance of light should be admitted, and sunshine too, wherever it is possible; for winter use the glass should be two thicknesses, with air space between; a continual draft will be found otherwise; the air will be chilled against the single thickness of glass, and will consequently fall to and pass along the floor toward the point where it can displace lighter air.

Rooms may easily be constructed as described that shall be nearly air-tight, and as such they will be quite uninhabitable; such construction, however, will enable the skillful architect to absolutely control the supply of air which it will be his duty to provide in abundance, delivering it in such manner and at such temperature as shall best conserve the health and comfort of the occupants, while the impure air is in like manner continually removed.

Economically considered, the free use of paper for lining walls and the double thickness of glass in windows will, in a very short time, pay large dividends in the saving of fuel; I do not hesitate to claim for an eight-inch wall properly lined with paper a greater resistance to the cold of winter or the heat of summer than is usually obtained from a wall built sixteen inches thick in the old method.

The line of thought suggested by Mr. Burnham in the initial paper was no doubt what was intended by those who suggested the topic for this meeting; that is to say, the writers were expected to hint at possibilities from the development of these two articles for purposes other than those for which they are now in use. Mr. Burnham's poetical fancies may be realized sooner, perhaps, than we expect, for the restless spirit of the American "crank," who goes about inventing things to meet our necessities, will find it an easy matter to solve any problem whose factors are so clearly indicated.

Perhaps it might be better to consider the subject in the light of how to obtain the best and most serviceable materials for construction, rather than to aim for the "model cheap house." The best is always the cheapest, and we have all tried to use the best we could get. How often have we found our interior finishing in a few months showing bad joints where perfect ones were made. This cannot well be otherwise. In only rare instances do we provide moisture in proportion to the expansion of the atmosphere, and the poor woodwork is subjected to a kiln drying process that it cannot resist, for wood is of cellular formation, and though subjected to treatment until the last particle of moisture is expelled, and one would think the shrinking process was complete; yet if old and shrunken cells be dressed off and the interior ones come near the surface they will contract nearly as much as the outer ones did when they were on the outside. Paper, when manufactured into material suitable for car wheels, ought to be, and no doubt is free from this defect.

While several objections to the use of glass, as suggested by Mr. Burnham, have presented themselves to my mind whenever my fancy has led in that direction, there are some ideas that have haunted me often. Two years ago, with many others, I went up the banks of the Hudson to Riverside Park, there to leave the remains of our most renowned countryman, a man as unlike the heroes of other nations as one can possibly imagine, a man who fills a page in the history of the world which is absolutely unique. This man's life and his death, his character and his place of sepulcher are certainly peculiar, and as my mind has often reverted to the spot where he lies it has imagined a suitable monument to complete the picture. None has ever quite reached my ideas of perfection, but over and again the thought has returned—it should be of glass.

NORMAND S. PATTON.

In order to prophesy the future development of such a material as paper, it will be well for us to consider its special characteristics, and from these we may judge whether it has reached the highest development possible. We class a great variety of substances under the general name

of paper, but our main idea is a flexible sheet, made of vegetable or other fiber which has been reduced to a pulp and then spread out, pressed and dried.

Its most obvious qualities are:

1. Continuity of surface. It can be made in rolls of almost any width and length. It is flexible, or by gluing several layers together may be made stiff. It will stop the passage of air because there are no joints.
2. It has no grain like wood and will not split.
3. It is not affected by change of temperature, and hence has an advantage over sheet metal as roofing material.
4. Whereas, in its natural condition it is affected by moisture, it may be rendered waterproof by saturating with asphalt, or by a variety of other treatments.
5. It is non-resonant and well fitted to prevent the passage of sound.
6. It is a non-conductor of heat.
7. It can be made of incombustible material like asbestos, or rendered fire resisting by chemical treatment.

We can, therefore, produce large sheets, either flexible or stiff, that will not conduct sound, heat or cold, and that will prevent the passage of air, moisture and fire.

Paper pulp is now made of such a variety of substances, each with its special qualities, that it is reasonable to suppose that we have not yet reached by any means the limit of its usefulness as a building material.

By combining paper pulp with other substances, and solidifying the mass by pressure, we may produce a material that will replace wood for many purposes, and the ease with which it may be made into sheets of any width and thickness that will not warp nor swell or shrink from heat or cold or dampness indicates the superiority of this material.

Mr. Burnham thinks that paper may become the material of the poor man's cottage. I will not dispute his position, for there is nothing impossible in this problem. The commercial success of the paper cottage will depend upon the discovery of some very cheap material for the pulp, and also a cheap process for compacting the same and rendering it waterproof. I am not aware that any compound has yet been placed on the market that will fully meet these conditions.

But granting that paper may become the poor man's friend, may it not aspire also to receive the attention of the rich? Is it not quite as likely that it will prove superior to other materials for certain purposes, as that it will be cheaper?

In the line of Mr. Burnham's suggestions, paper wheels are used because they are better rather than cheaper, than iron. For the deafening of floors, I am reminded by the curling up of matched flooring, that wet mortar has its disadvantages when used for this purpose, and when we must finish buildings in a hurry may we not stop the passage of sound by paper, perhaps combined with mineral wool, without introducing moisture into a building already too damp? And here I am led to diverge from the main topic to suggest that there is an interesting field for experiment in the line of determining the cheapest and most effectual method of stopping the passage of sound through floors and partitions. As far as I am aware there have been no thorough experiments made in this field, and we could hardly put some of the money of this association to better use than in arranging a careful series of experiments on the resistance of various materials and combination of materials to the passage of sound. We try mortar and plaster, sand, ashes and concrete between joists and on top of them, paper and felt, mineral wool, air spaces, etc., but who can tell how to stop the most sound for the least money?

In the way of decoration, good wall paper is unquestionably superior to poor fresco painting, and is so much cheaper than a good quality of hand decoration that its use will not be confined to the homes of the poor. We may expect to see new styles of "relief," Lincrusta, "papier-maché," etc., made from various kinds of paper.

Glass.—It is hard to come down from among the clouds and "half translucent finials" of Mr. Burnham's glass house to a prosaic discussion of this topic. And if I am to cherish a hope of occupying at some time an "opalescent morning room" in such a fairy palace, I must be chary of any hard criticisms of this artistic dream. For is it not recorded that "people who live in glass houses must not throw stones."

This truth which comes to us from an unknown antiquity, indicates clearly that there is "nothing new under the sun," and that the glass house has been tried long ago and found wanting. It is probable that the owner strove to defend his finials from the "maddening crowd," while he persisted in continuing his favorite pastime of throwing stones. The result has proved that the throwing of stones is so dear to the heart of man that the glass house must go, and we be content to dwell in more substantial, though less artistic abodes.

Indeed the present tendency is in exactly the opposite direction from that suggested by Mr. Burnham, for we behold on every side massive castles of stone from which the owners may hurl the gravel of the roof at any unlucky art critic who ventures to pause in front.

And yet glass has its good points. It is a material that ought to please the ladies, for they need not ask the salesman if it will "wash," and its beauty may lead some inventive genius to overcome the difficulties that bar its more general use.

The chief failings of glass as a constructive material are its brittleness and its fracture by sudden changes of temperature. Such limited toughness as our common glass utensils possess is only secured by a careful annealing. We have heard of toughened glass, but still await its appearance.

The use of glass is certainly increasing, but as a constructive material it is limited almost entirely to the transmission of light. We are not as far advanced as the French in the application of glass to roofs and floors. In Paris a common form of roof to an entrance porch is a light framework of iron filled in with heavy glass, and galleries are formed in bank and office buildings with floors entirely of iron and glass.

It does not seem likely that we will see many new applications of this material, unless we have a great cheapening of its cost, or a modification of its qualities.

D. H. BURNHAM.

We all agree, then, that paper is likely to come into more general use, and be applied in many places where it has not been. We can build something after the following manner now: The frames of the house to be of wood, the siding to be of building paper laid to break joints and weather, the lower edges to be cut into scallops, waving lines, or other shapes to suit.

Around the openings the paper to fasten into rabbits and the joints to be made tight. The roof to be made much the same way, leaving the effect of tiles, shingles, or whatever the designer may choose. Gutters, exterior architraves, or other parts may be stamped or molded in papier-maché, some for ornaments and details around porches, bays, or to ornament exterior features.

The entire exterior may be either finished with spar varnish or other paint to make the same impervious to weather and to decorate at the same time.

The interior features, even the walls and ceilings of a house to be much the same as the outside, and decorated in much the same way. The floors thus may be made of stiff pasteboard where carpets are to be used, and it may even be possible to leave them bare if finished with some spar varnish or other preparation hard enough to preserve them from the ordinary wear and tear of the floors.

All the above may be done now, and probably at a saving over the usual methods. It would require careful and thoughtful investigation on someone's part, but probably there is no need of any new material or condition not already close at hand. It may not be possible to make the sash, doors, stairs and blinds of paper at present, although it would be easy to do so. The special machinery could be made for their manufacture, and should the rest of many houses be made of paper, undoubtedly manufacturers would soon supply the above-mentioned articles also.

Paper, therefore, is already practicable for all parts of a house, except the constructional details.

A house thus built can be erected quicker, cheaper, and in a more cleanly manner, and, moreover, fitter to live in on account of the absence of moisture. All these things are more advantageous, and should recommend the free use of paper at an early date.

But the decorators have already shown that there is more value than the mere constructional one, and that not only may some of the wall ornaments be made of paper, but all of them, and that by it alone of all materials now known and used, an artist can obtain rich low relief effects in arabesque or cognate details at a reasonable cost where he wishes to enrich an entire surface. There is this additional advantage, that the contractor, while he is finishing the frames of the house, can prepare his entire wall surface so that they may be brought to the house and fastened up in a small part only of the time usually occupied for the finishing of the interiors.

When paper comes into general use there will be no more shrinkage, there will be no more abuse of the architect for the bad work of mechanics in the way of imperfect joints, chipped and dented wood of inferior quality as compared with the specifications! There will be no more ugly nail holes or other usual wood annoyances. There will be no more patching or deafening or trouble arising from wet floors and walls, and thus most of the anxiety and annoyance of an architect's life will be eliminated.

Glass.—I am struck with the expression used by Mr. Randolph about the "restless spirit of the American crank." It is a good one and conveys a fine shade of meaning. I have read somewhere what Tyndall said regarding the necessary mental equipment of a good scientific man. He laid much stress upon the value of a great imagination to a physical researcher; and, lately, the greatest of modern essayists, M. Taine, has all at once discovered that the three greatest Italians, Dante, Michael Angelo, and Napoleon Bonaparte, were first of all men having giant imaginations. So it seems that if one has both the power of imagination to an unusual degree, and also active practicability in his nature, he will at once rise above the level and will appear as a star shining high above men's heads. But since only few have both glowing generalizing minds, and at the same time practical tendencies in work-habit, it becomes of importance to society that we supplement each other, and most of us being dull, plodding fellows, seeing only what we are made to see, "the American crank" becomes a thing of greatest value. The "wonder-if" of the past is the prophet of today. Many things have been less creditable than that glass will come largely into use for construction as well as ornament.

Mr. Patton says he is not aware that glass has been annealed much, and this would seem to settle the question as to whether or not we shall ever build of it; in fact he says this knowledge of his, namely: that he is not aware of its being done, shows that the tendency is all the other way, and that more solidity of materials is constantly aimed at.

Annealing of glass, like the annealing of iron, adds the quality of toughness. If glass is ever made tough it will become better than any other material for walls because it can be made cheaper than any stone, and is already stronger. So much is this material already thought of by the anticipators of the future, that one of them who has been practical enough in life to make himself independently rich at forty, has actually gone into the matter with a view of spending large sums of money; so earnest has he been about it that he has covered his ideas with patents. I am sorry not to be able to reach him today that you may indeed listen to a glorious "American crank." He would build hospitals ranging longer from east to west and exposed mostly to the sunshine on the south. The walls to be of glass, opaque or not, on the north, but certainly transparent toward the eternal source of heat and light. He would keep out the cold, damp air when the surgeon required, but he would let in the glowing health of the sun's warm rays to mend up the failing tissues of the body and the despondent minds of the patients. Nor would he long permit the germs of disease to linger on the premises, for his impenetrable surfaces of floors, ceilings and walls would be all made of polished glass, from which every extraneous material could most easily be removed. The large sheets of this material would leave few and exceedingly fine joints in which the microbes of fever could lurk.

The rooms of the sick might be lighted at times as if the patient were out of doors, or, on the other hand, a system of curtains might be draped about the walls so as to totally exclude the light, or partially, according to the surgeon's orders.

The crank would build houses of glass also; he would so perfect methods that the contractor for the seaside house would no longer need his mortar boards and beds, his lime, cement and hair, but would ship to the locality a complete plant for manufacturing what glass he needed upon the very spot.

Annealed or not, the stuff is practicable to be used. It will require experience, and no doubt disappointment, before men know how glass should be made for this purpose, under different conditions and for different purposes. And, as in other materials, so in this, economies must be carefully studied, methods constantly improved till the bare facts we started with today are made to tell for the good of the people. These facts are as follows:

That glass can be made under favorable conditions cheaper per cubic foot than good building stone, because after buying stone you have to cut and ship it, while glass is finished ready to go into the walls when cast.

That glass can be built more quickly into place.

That all moisture of construction is cut off, thus making the quick finish and permanency of interior work more sure.

That for once and all the ultimate of cleanliness is obtained, which alone is of vast consequence to us.

That not only flat color surfaces, but actual depth and consequent richness can be obtained in decoration by this method as by no other.

Finally, that a house thus built will protect its occupant more thoroughly than any other from dust, dirt and permeation of gases, and thus from the seeds of disease and death.

After a general discussion by Messrs. Burnham, Randolph, Patton, Pierce and others, the meeting adjourned. It was announced that the Executive Committee had decided to omit the meetings in July and August and the next meeting would occur September 6.

Association Notes.

WESTERN ASSOCIATION OF ARCHITECTS.

The board of directors of the Western Association of Architects met at Cincinnati, June 18. There were present: Dankmar Adler, of Chicago, G. W. Rapp and Charles Crapsey, of Cincinnati, and G. M.

Goodwin of St. Paul, Minn. The board received remonstrances from quite a number who had been dropped from the roll of membership for non-payment of dues, coupled with their failure to "pay up," was because of neglect. The directors decided to reinstate all such upon payment being made. Eleven new applications for membership were received and passed upon, their names to be reported to the next meeting of the association for action. In the case of several members, whom it had been decided to suspend because of following other pursuits than that of architecture, their remonstrances were attended in some instances with the assurance that contracting had been abandoned. All such cases were ordered to be investigated by members of the board, and where found exclusively engaged in the practice of architecture, to be reinstated.

Suggestions presented by President J. W. Root were received. One of these calls for the establishment of an exhibit of drawings, photographs, etc., of executed work at the next convention of the Western Association, and that an effort be made to include in the exhibit the works of those most eminent in the profession, so that it may serve as a record of contemporary work. The board appointed J. W. Root, Charles Crapsey and J. F. Alexander as a special committee for the carrying out of this enterprise, these to be aided by the standing committee of the association upon the collection of drawings. A further suggestion was made by Mr. Root, to the effect that a series of papers be prepared under the auspices of the board, all to be upon one subject, for instance, "The relation between architect and contractor." The consideration of this suggestion was postponed for further consideration by a meeting of the board, to be held in Chicago in July.

ARCHITECT S. S. BEMAN has been engaged to design the new depot for the Wisconsin Central Railroad Company. This will probably be the largest and most expensive depot yet erected in Chicago. It will be situated on the corner of Harrison street and Fifth avenue. On the Harrison street side, which will be 228 feet front, three large arches will span driveways into an immense inner court, which will front the car tracks. The waiting rooms, etc., will occupy the Fifth avenue side, which will have 300 feet frontage. A tower 250 feet high, near the corner, will be a feature of the depot and part of the main building will be nine stories in height. The sheds will be 675 feet long. The entire cost will be upward of \$1,000,000.

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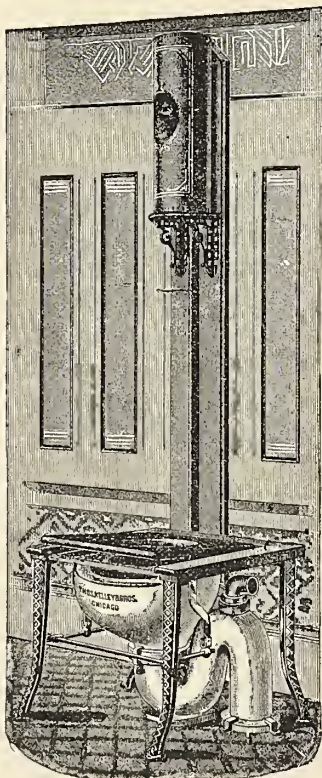
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Committee on Uniform Contracts and Specifications—The executive boards of the several state associations to report at the next session of the Western Association.

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THE next convention of the Western Association of Architects will be held in Cincinnati, on Wednesday, November 16. In certain respects this convention is of unusual significance and interest. Whatever was ephemeral in the enthusiasm which gave birth to the association has now passed away. Whatever men there are likely to relapse into indifference, will have by that time reached the point of greatest indifference. In other words, the association will be in a position to show its real strength and weakness. Of its real success there can be as little doubt as of the necessity for its existence. But how rapidly it will grow in power, to accomplish those objects for which it was formed, is the question, and to this no individual member of the association can be indifferent. In no respect is the present status of the architectural profession in America satisfactory. We are, perhaps, as well off here as anywhere else; but compared with what should be the status and public recognition of a "learned" profession, we are not well off.

THAT this position should be equally high with that of the law or medicine no one may question. But if architects are to attain this height, it must be through such coöperation and association as will first elevate each individual to deserve the place, and, second, command public recognition of the high standard thus obtained. The association is, therefore, valuable where it aims in these directions, and it succeeds as these aims are realized. That this is the view of the officers is evinced by their action in relation to the next convention. They are sending circulars to each member, impressing him with the importance of the convention, and with the true aims of the association. Circulars are also addressed to each member, and to each chairman of standing committees, calling upon them for full and carefully considered reports. The profession at large is addressed by them, stating the objects of the association and calling for coöperation. It is the intention of the officers to make a notable collection of photographs, drawings, prints, etc., illustrating the executed work of American architects during the last ten years; and to accomplish this, each member has been invited to contribute, and all of the leading men of the American Institute as well. The exhibition is intended to be very comprehensive, and is to be for the purpose of showing buildings rather than drawings. In all respects the convention promises to be notable.

THE Association of Ohio Architects will hold its semi-annual meeting at Cleveland, on Thursday, July 21. This will be the first meeting the association has held at Cleveland, and should not only prove of great interest to the architects of that city, but be attended by every member throughout the state. The measures that will come before the convention will be of vital importance to the entire building interest of the state, much attention having been given since the last meeting to the work of securing proper legislative acts, not only for the government of the architectural profession, but for general conducting of contract work. The committees upon statutory revision, and the proper licensing of architects, will report the progress made in this direction with the last legislature, and that upon lien laws will also report progress. As a full support is necessary to aid the committee in securing proper legislation, which will not only largely benefit the entire profession, but the public at large, no architect can afford to be absent from this meeting, where valuable assistance can be given in regard to future plans. As the coming convention of the Western Association will be held at Cincinnati, the state association

will be interested in making it in every way successful. This should not be left for the individual architects or even the Cincinnati chapter to bear the responsibility of, but ways and means should be fully discussed by the state association, and the report of the Committee on Entertainment, which was appointed for this purpose at the last annual meeting, given substantial indorsement.

WHILE the work of the arbitration committee of the Master Masons' Association and the Bricklayers' Union of Chicago, is in progress, the entire attention of the building interest seems to be directed to the result, as if this would bring about the final settlement, and the eradication of all unjust assumption on the part of unions in the building trades, and the instant resumption of business. So concentrated has been the popular mind upon this point that the fact is overlooked that, while the bricklayers are an important factor, the most important, perhaps, in the building trades, they are but a part of the whole. The carpenters' union is as unjust in its demands as that of the bricklayers, but lacks their strength and has a stronger and more united association to oppose. In fact all unions in Chicago have copied after that of the bricklayers, and are only inferior to them in strength. When an agreement is reached by this arbitration committee, general action should be taken by the Central Council of the Building Trades before a general resumption of work is attempted. Unless that council can publish to the world that the arbitrary demands of trades' unions have become inoperative in Chicago, and that there is now a certainty that the measures taken will place the entire building interest in such a position that strikes and lockouts will no more be resorted to; that building will in the future be free from the interruptions common in the past, there will be no healthy revival of building this year. It is not a settlement of differences between masons and bricklayers that the public has demanded, and it is not this settlement that will bring about the revival of business that is so anxiously looked for by all interested, but it is the permanent victory of justice and personal freedom over brute force and unwarranted interference with the business of others by improperly conducted unions. Half measures will not do, an "agree to disagree" policy will not do; but now, while business is suspended, and so much time and money has been spent in so just a cause, no half measure should be for a moment countenanced. The work of the Central Council of the Building Trades of Chicago begins when the masons' arbitration committee makes its report.

AS we go to press the arbitration committee, composed of five members of the Master Masons' and Builders' Association of Chicago, and five from the union bricklayers and stone masons, with Judge M. F. Tuley as umpire, makes its report, which we print in full in this issue. From an arbitration standpoint no fault can be found with the rulings of the umpire, and as an entirety the report will for a long time stand as a precedent in all disputes in the building trades. We are, however, not prepared to fully concur in the policy of the master masons' association in appointing the arbitration committee from its own body before the matter had been disposed of by the Central Council of the Building Trades. That body was organized for this work on a broad plan, by which not only the arbitrary rules of the existing union of bricklayers might be eradicated, but in all other unions in the building trades in Chicago. Recognizing that, beside the particular evils in each union which needed their attention, greater harmony and greater facility for work might be attained, the entire work should be carried out on one plan. For instance, in the matter of hours. While eight hours might be conceded to bricklayers if their interests

alone were considered, this committee would look to the interests of the other trades, and decide on a number of hours that would best suit the majority. Because in the building trades it is more or less inconvenient for different trades to work different hours, the bricklayers having now agreed on eight as a working day, others will have to conform to it. Thus the bricklaying trade, considering its own interest alone, sets the pace for all. A majority of carpenters, both contractors and workmen, would rather work nine or ten hours, but their work is so connected with that of the masons that this is hardly practicable. Two points in the ruling seem thoroughly wrong. The report seems to concede to the workman a right to not only still have a voice in, but to control the apprenticeship question, and it also seems to limit the employer to the hiring of members of the union. If this is the spirit of the agreement it is wholly wrong, and the principle of individual liberty, which has been so nobly fought for up to the present time, seems to be in danger of being thoroughly ignored. It may yet be necessary for owners and architects to teach contractors and workmen alike, that to them a principle means something more than a "glittering generality."

INDIANA is to have a soldiers' monument, which, if the present intention is carried out, should surpass any similar work in the United States. The legislature has passed a bill appropriating \$200,000, to be expended in its design and erection, and the G. A. R. posts have appropriated \$25,000 additional. A committee to carry out the provisions of the bill has been appointed, composed of George J. Langsdale, of Greencastle, chairman, George W. Johnston and D. M. Ransdell, of Indianapolis, and S. P. Voiles, of Salem. J. F. Gookins, of Chicago, an artist of considerable repute, has been asked to act with the committee in the capacity of secretary. The general plan of the committee is to advertise for designs, with the privilege of accepting one or rejecting all; pay \$1,000 to the design accepted, and \$500 for second choice. The monument is to occupy a circular park in the center of the city of Indianapolis. Anxious as we are to see public attention turning to the consideration of monumental art, we do not desire in any way to discourage so laudable an enterprise, but must say at the start that their method of obtaining a design is no worse and no better than the general competition plan that is pursued, with very slight variation, by public officers throughout this country. There is no variety in the results obtained however. They are always the worst possible.

IN conversation with one of the committee, a statement was made which shows how a committee like this one, and composed of able, intelligent and honest men, are restricted by the law under which public works are executed. He said, in effect, "The law calls for a competition, but we know that artists of repute will not design for nothing, or go into a lottery scheme in which the chances of success are so small. We may, however, get from some young and ambitious designer such an one as will suit us. We do not expect this, however, and we are at liberty to, and probably will, throw aside all the designs offered, and employ one of the half dozen leading designers in the country to carry out the work." No stronger comment upon the value placed upon designing talent by the average legislator can be found than in the offer of \$1,000 (which is usually the minimum prize) for designs calling for the expenditure of from a quarter to half a million of money. The price of brick, stone and mortar is easily estimated, but because talent cannot be piled up and measured it is consequently the least considered element, even in the erection of a work purely devoted to the expression of a sentiment.

The Disposal of Sewage of Isolated Country Houses.*

BY WILLIAM PAUL GERHARD, C.E., CONSULTING ENGINEER FOR SANITARY WORKS.
[Continued.]

IN the following I shall dwell more at length upon the *disposal of sewage by subsurface irrigation*, for, in my judgment, this is the most available system for the disposal of liquid and semi-liquid wastes of isolated country houses. The system has long ago attracted public attention, and has, in recent years, been taken up by the foremost sanitary engineers, for more than any other method, it promises the entirely successful solution of the problem of sewage disposal for isolated houses. It certainly recommends itself, owing to the peculiar facilities for disposing of sewage *without creating an offense to sight or smell*, for it is only too well known that open or surface irrigation becomes, in many cases, exceedingly objectionable in close contiguity to mansions or dwellings.

The origin of the subsurface irrigation system is usually attributed to the Rev. Henry Moule, Vicar of Fordington, the inventor of the earth closet. He looked upon it as the best solution of the slopwater disposal question for cottages which adopted the earth-closet system. But according to Mr. Edwin Chadwick, subsurface irrigation had previously been tried independently and systematically on a large scale by M. Charpentier, a French vine-grower, near Bordeaux. Mr. Chadwick states that the results which the latter obtained with vines and fruits, as well as with market-garden produce, were most satisfactory. The system would probably never have grown to its present popularity had it not been for Mr. Rogers Field, Mem. Inst. C. E., who, recognizing the desirability of intermittent action, invented his automatic flush tank, which he applied successfully to the disposal of liquid household wastes. His first experiments were made at some laborers' cottages, belonging to his own estate at Sheffield, in Essex. Since then the system has been adapted to all possible conditions, and has given such satisfaction that it is now considered admirably suited to isolated houses not in reach of a sewer, but having sufficient porous or well-drained ground about them, with favorable lay of the land. Col. Geo. E. Waring, Jr., was the first to try the system in this country, about fifteen years ago. Finding that it worked satisfactorily in the case of his own residence in Newport, R. I., then not in reach of a sewer, he adopted it afterward with success for the disposal of sewage of cottages and suburban residences, and on a larger scale for the purification of sewage at the women's reformatory prison at Sherburne, Mass., the Keystone Hotel, at Bryn Mawr, Pa., and at Lenox, Mass., for the sewage of the whole village. Since a number of years the system has been extensively applied by many sanitary and landscape engineers, and by a few progressive architects, for the disposal of sewage of isolated country houses or institutions not within reach of sewers, but liberally supplied with water and plumbing appliances.

The system is based upon the well-known fact that the aerated layers of soil *next to the surface*, the subsurface as it were, possess in a high degree the power of destroying organic substances buried in them, by nitrification and oxidation, aided during a part of the year by vegetation, and assisted at all times by minute organisms or bacteria. The latter play an important part in the round of changes in Nature. "They are," says Tyndall, "by no means purely useless or purely mischievous in the economy of nature. They are only noxious when out of their proper place. *They exercise a useful and valuable function as the burners and consumers of dead matter, animal and vegetable*, reducing such matter with a rapidity otherwise unattainable to innocent carbonic acid and water. Furthermore, they are not all alike, and it is only restricted classes of them that are really dangerous to man. One difference in their habits is worthy of special reference here. Air, or rather the oxygen of the air, which is absolutely necessary to the support of the bacteria of putrefaction, is, according to Pasteur, absolutely deadly to the vibrios which provoke butyric acid fermentation."

I lay particular stress upon the importance of distributing the sewage close to the surface of the soil, at a depth not exceeding 10 or 12 inches. Aeration is a *conditio sine qua non* of the whole system. At greater depths oxidation and purification become very much slower, until they finally cease altogether. The *subsoil* is not able to effect a complete purification of sewage, as the oxidizing influence of the atmosphere does not so freely reach it. It is the layer of earth next to the surface, the *subsurface*, which acts on the sewage. Hence the name of the system is derived, and it is an error, committed quite frequently, and to which I have more than once called attention, to call the system "subsoil" irrigation.

We see, then, that only where sewage is distributed close to the surface, where sufficient oxygen attaches to the particles of the soil, are the organic matters in it taken up as nourishment by the roots of plants, and

reduced and destroyed by the bacteria in the soil. The liquid sewage, freed of its coarser impurities, soaks away into the porous ground, and thus becomes still more clarified by filtration, so that when removed by deep under-drains, it is generally found to be quite clear, colorless, free of taste or smell. By arranging an *intermittent* discharge, the upper layers of the soil are enabled to take up oxygen during intervals between discharges, and to prepare for the next volume of sewage, while the ground is prevented from becoming saturated, wet and swampy.

There is a radical difference between such a system and a loose or leaching cesspool. With the latter the area of soil used for purification is quite small as compared with the former, where the surface can be chosen in proportion to the amount of sewage to be disposed of, which is not a feasible thing to do with a cesspool. We all know that even in the case of a leaching cesspool, newly built and first put to use, some purification of the sewage which oozes out at its pores is accomplished by mechanical filtration. After some use, however, its pores clog up, and the soil around the cesspool becomes saturated with sewage matter, undergoing, in the absence of oxygen, a very slow process of decomposition. The sewage soaks away unpurified, polluting springs and wells, and the unwholesome gases generated taint the ground air, and, being given off at the surface, frequently enter our houses. It is for these reasons that all sanitarians look upon a leaching cesspool as a nuisance and a standing danger to health.

Briefly described, the subsurface irrigation system consists of two parts: *First*—An absolutely tight receptacle, or sewage tank for liquid household wastes, including the contents of water-closets. *Second*—A network of common distribution drain tiles, laid a few inches below the surface of the ground, with *open joints*, so as to permit the liquid to ooze out at numerous points. This network of pipes, buried in the ground, constitutes the irrigation field.

As stated heretofore, it is an important condition to insure the successful working of the system, that the discharge of sewage from the sewage tank to the irrigation field be *intermittent*, and that, instead of a constant, dribbling stream from the tank, there be a powerful rush of sewage in a large volume, so as to secure an even distribution and the perfect filling up of all pipes. It is, to say the least, desirable that the discharge should not occur more frequently than *once a day*, that is, every twenty-four hours, and the size of the tank should be governed hereby.

The soil of the field should, preferably, be gravelly and porous. All tight clay soils, and ground liable to dampness, should be properly under-drained by deep land drains. The sub-irrigation field should not be located too near a house, wherever there is abundance of land favorably located, permitting the sewage to flow away by gravity. As a matter of precaution, it is well that some attention should be paid, in locating the irrigation field, to the direction of the prevailing winds, although as a matter of fact, a properly working irrigation field is quite inodorous. So much is this the case that the tiles may be, and in practice often are, laid under the well-kept lawns adjoining summer residences, without ever causing an offense. Another precaution to be observed where the water supply of a country house is derived from wells or springs, is, that the field should not be located near them.

The preparation of the subsurface of the field is accomplished in the following manner: Common unglazed agricultural tiles, two inches inside diameter and one foot in length, are laid about 8 or 10 inches below the surface on continuous boards, or, better, in gutters of earthenware, laid accurately in the trenches at the uniform grade required. Should the tiles ever clog up, it thus becomes an easy task to take them up, to clean them and to relay them in the gutters, an operation readily performed by a common laborer. It is quite important that there should be between the tiles at each joint, a space of about $\frac{1}{4}$ inch to facilitate the oozing out of the sewage. Small earthen caps about 3 inches long are placed over the ends of tiles at each joint to protect it from dirt or earth falling from above. It is not necessary to give to the absorption tiles a greater fall than about 2 or 3 inches per 100 feet, for if laid at too steep a grade the sewage would rush to the lowest level and saturate that part of the irrigation field. It should be noted that much of the success of the system depends upon the accuracy with which the distribution tiles are laid. They should branch out from the bottom of the main carrying conduit, and special T or Y branches are manufactured for this purpose. The main drain should be laid at least 2 feet deep, and the 2-inch branches should be cemented until they strike the proper depth of 8 or 10 inches. The main drain conducting the sewage from the flush tank to the irrigation field should be 4 inches in diameter, except in the case of large institutions, when the size of the flush tank often requires a 6-inch main conduit. It can be laid with as much fall as the layout of the land will require, but where it approaches the absorption field its fall should be limited to 4 or 6 inches in 100 feet, to prevent the sewage from running to the lower part of the field, overcharging the lower lines of drains. The distance between the lines should

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average about 5 feet. The ramification and general layout of the lines will depend on the contour lines of the land. In the case of level ground the lines may be parallel to each other.

The number of feet of tiles which it is necessary to lay will depend upon the quantity of sewage delivered each day. It will vary, moreover, for like quantities of sewage, with the general character and porosity of the soil of the absorption field. Wherever the soil consists of a heavy clay or is liable to be wet or swampy, it is absolutely necessary to thoroughly underdrain the field by a complete system of agricultural tiles, laid at a depth of from 4 to 5 feet, removing and discharging the purified sewage as well as any excess of soil moisture.

The flush tank is usually built of hard-burnt brick, laid in hydraulic cement mortar, and made perfectly water tight.

An important and most necessary precaution to prevent the clogging of the siphon, which empties the tank, or of the distribution tiles, is to build in connection with the flush tank, and between the house and the latter, an intercepting chamber or grease trap, intended to intercept all solids, undissolved paper and fatty waste matters from the kitchen. Such a chamber is, in a certain sense, a cesspool, although it differs from the ordinary objectionable device of this kind in having its liquid contents frequently changed, and in being built of small size. Its emptying and cleaning must, of course, by no means be neglected. Much of the solid matter and paper, etc., is reduced by maceration and decomposition, and flows dissolved by water into the liquid sewage chamber. The overflow pipe connecting both must dip well below the surface of the water level in the first chamber to prevent scum or grease from overflowing into the flush tank. The flush tank proper should, generally, be built circular in shape, and of a size to hold one day's volume of sewage. The liquid wastes from the household are retained in this tank until it is filled, when its whole contents are suddenly delivered into the main drain, and thence into the irrigation tiles, whereby all the rows of tiles are *uniformly* charged, and the whole of the absorption field is brought into use each time the tank is emptied. If the sewage is discharged suddenly in a large volume, it oozes out, not only at the bottom, but also at the sides and top of each joint. The purification begins at once. The clarified liquid soaks away into the ground, the impurities being retained by the earth, where they are quickly destroyed. Air enters the pores of the soil and prepares it for future use, while the tank is gradually filling for the next discharge.

The interval required between two consecutive discharges, the exact proportion between capacity of tank and size of house, between size of tank and number of feet of drain tiles, etc., are details requiring judgment, skill and experience, and which must be left to be determined in each individual case separately.

To discharge the flush tank, recourse may be had to various mechanical appliances. The simplest arrangement, but one that requires daily attendance and some manual labor, is to place a gate valve at the outlet pipe leading from the bottom of the tank, which valve is opened or closed by hand whenever the tank becomes filled. This arrangement may answer for smaller country houses, in which the amount of water used is limited, being usually pumped into the tank by hand. An *automatic* device is preferable in many respects. This may be either a tumbler or tilting tank, or one of several siphon devices now in the market. I have, so far, found none better nor cheaper than the annular siphon, as devised by Mr. Rogers Field, C. E. If space would permit, I should illustrate and describe the manner in which I usually arrange it, but this is not possible.

[To be continued.]

Life and Works of Jean Francois Millet.*

BY WALTER CRANSTON LARNED.

THERE is a spot on Normandy's coast where the high scarred cliffs tower over the sea, and the waves beat with never-ceasing roar at their feet. In one of the valleys among these giant cliffs nestles the little hamlet of Gruchy. Should one approach it by sea, it would seem inaccessible, so forbidding is the aspect of the rocky shore. Nor would man be tempted to land there, for it could hardly be thought that subsistence might be found in so wild and desolate a region. Nevertheless the mighty cliffs uphold pleasant farms, and many a French peasant has lived there year after year tilling the soil, and finding no unkindly response to his labor in the harvest time. Moreover when the storms came huge masses of seaweed were cast upon the shore, and herein was wealth to those who dared brave the danger of plucking it from the fierce waves and carrying it up the steep precipices to the farms above. Among these farmers dwelling at Gruchy, was Jean Louis Nicolas Millet, who was the father of the immortal painter. He was a simple man and gentle, of the purest life, and greatly respected by the neighbors. He loved nature in all her forms and would show the little Francois, with glowing words, the beauty of flower, tree and field. Indeed this tall peasant, with his flowing black hair and soft eyes, was a real poet, though he died unknown except for the immortality lent by his greater son. He lived in one of those long, low houses,

with a great thatched roof, which have become associated with the peasantry of France through the pictures of Millet. The windows are few and small, with clumsy wooden shutters. The green vines climb lovingly over the low, gray walls and up on to the matted roof, and the barnyard fowls cluster familiarly about the door whose threshold is but a single step above the earth. Some trees lean over it as though glad to give it freely their grateful shade. Near by is the barnyard and the barn with stacks of hay, among which stand the cattle. It seems a pleasure of plenty, and the house itself, though humble, is strong and solid, quite able to shelter the Millets of many generations. Truly it is a family homestead, and Millet, the father, is a patriarch meet to rank with those of the Jewish time. He is the head of his house, and to his home, after the Sunday mass, come the family and near friends. How he loves to receive them, and with what genial, gentle hospitality does he share with them such simple fare as he may chance to have. It is lovely to imagine the tall, powerful poet-farmer beside his lowly hearth, surrounded by those of his race, and those who loved him, all looking up to him with respect and affection, partaking of his kindly bounty, and more than all, softened and purified by the gentle air of peace and love he spreads about him.

These Millets, though they lived humbly, had gentle blood in their veins. The mother was of a noble family, by name Du Perron, and Millet's great uncle was an abbe, who had the high spirit which marks all the members of his family. He nearly lost his life at the time of the Revolution, because he would not take the oath to support the Constitution, for he thought it contrary to his allegiance to Rome. They took his living away and he worked in the fields, supporting himself and educating in part, at least, the children of the Millet family. But the most noteworthy figure in this family group, is that of the old grandmother, Louise Jumelin. Here indeed is a character commanding wonder and admiration, and to her powerful influence, never lost in all his life, must be largely attributed much of the peculiar genius of Millet. For she trained little Francois. She was to him a mother, because alas! his own mother, being young and strong, must toil all day in the field, while the grandmother, old, feeble in frame, but vigorous in mind and most tender at heart, may sit within and gather the little ones about her knee. She was an intensely religious woman, of as simple and pure a character as ever graced any church in any age. The ideal of her life was to be as one of the saints whose pictures hang over the shrines in the old church; but she never felt she had attained to any goodness, for her humility made all her good works seem to her as naught. Her charity and alms-giving were without limit save the limit of her means. No poor wayfarer was ever turned from the door of the Millet homestead. All were welcome to such shelter and food as the family itself had. How often must Millet have seen the poor beggar, the weary wanderer seated by the chimney corner, warmed by the fire and comforted by the homely food. He learned there never to turn his back upon any poor man, and never to close the door of his house or his heart upon those who called for help. She also, with his uncle, the abbe, taught him to love and reverence the Bible as the inspired word of God, so that in after years he says he found in that book his inspiration, and the source of all power he ever had or hoped to have. It is pleasant to linger with this simple household, full of toil, and rich only in good works. In the summer time they all labor according to the strength of each, in the fields, helping themselves so far as they may, hoping that God may bless them in the harvest. Then comes the bleak winter with its storms. But they do not rest from their labors. They gather within the home, and the men weave baskets while the women spin. At this season poetry and song gladden and charm them, for while they work they tell again and again the weird tales and fables whose mysteries had thrilled their ancestors in the hours of night, and then they gladly sang the carols and roundels whose notes had echoed year after year about the hearthstones of their fathers. There is one more picture in this poem of an artist's childhood which the eye lingers upon fondly. It is early morning in the summer, and the dew yet sprinkles diamonds among the cobwebs in the grass; a tall farmer steps from the Millet door and strides over the fields, with his hoe and spade on his shoulder. By his side, perhaps holding his horny hand, runs merrily along a bright boy, with deep, dark eyes and long, black hair. He runs merrily for he goes to the fields he loves, though he goes there even at that tender age to bear his part in the common toil which earns their bread. As they go, the elder Millet, himself almost a poet, almost an artist, and quite a revered patriarch, points out to the enthusiastic boy, all glowing and trembling with artistic feeling and poetic imagination, the ever fresh beauties of the familiar scene. At times he will pause that the boy may the better see the living beauty of some tree or flower, or the wondrous light and shadow which the rising sun strews over the meadow and the hillside. And perhaps the father will say, as he often did, that these beauties should be painted just as they then appeared to his eyes that loved them, little dreaming that the eager boy who drank in his words would put upon the canvas that yellow sunshine, and those cool shadows, with a fervor and a power which no modern artist has equaled, and which none can hope to equal who do not love them as he did. It would seem that the hard lot of these peasants, condemning even the children to daily labor, would have crushed out this poetry, and that these delicate artist's dreams would have been rudely buried beneath the clods the dreamer daily turned. But no, the inspiration was too strong; and even as a boy in the fields Millet found time to sketch, and with eagerness he portrayed all that met his eye and touched his heart. And the father and proud mother and grandmother saw at last that the sketches were good and the lad was born an artist. They showed the designs to a painter at Cherbourg and he said it was impossible young Millet could have made them alone. When the truth was told him, he said the boy would be a great painter. Then the parents, always ready to follow the guiding hand of Providence divine, devoted their child at once to his art.

So at the age of eighteen Millet's peasant life ends, and he goes to study his beloved art with the old painter Mouchet, at Cherbourg.

There is nothing noteworthy in his life at Cherbourg. He soon exhausts the resources of the little place, and far outstrips the humble painter

*Lecture delivered before the Art Institute of Chicago, February 8, 1887.

who was his teacher. The astonished city fathers vote him a pension, though but a niggardly one, in order that he may go to Paris and complete his studies.

In the month of January, 1837, the brave but heavy-hearted young man left the land of his youth, and with his scanty luggage, in which his grandmother has not forgotten to put a Bible, he found his way to Paris, the El Dorado of young artists. He was sad and full of foreboding, and homesickness almost conquered him. At last he finds his way to the Louvre. The world of art stands open before him and he may roam at will among its loveliest scenes, hand-in-hand with those greatest ones who have best unfolded the mysteries of beauty. Straightway he falls in love with Michael Angelo, that giant artist whom more than any other Millet resembles; but Fra Angelico, the gentle painter monk, also steals sweetly over his heart. Nicholas Poussin, too, with his weird landscapes, wins his love. Enraptured with these he hates those who are their opposites. Watteau and Boucher he despises and calls their pictures marionette shows. At last he enters the studio of Delaroche, then at the zenith of his fame. This was not because he admired Delaroche, for he thought his pictures theatrical, but because there was no other artist in Paris of sufficient reputation to be his master—perhaps no other who could teach him anything. And now must be described one of the most striking scenes in the life of any artist. A young peasant has just come from Normandy. So uncouth is his appearance that the city-bred pupils of the famous Delaroche call him "the man of the woods." He stands in the studio beside him who is even now painting the great Hemicycle, the picture whereon he hopes to rest his fame. But he does not bend in awe-struck admiration before the master's work. He sees so far beyond its utmost limits that his eye will scarce bear to rest upon it at all. Of all the artist's pupils, who cluster about, none understands this strange, wild peasant, as with bright eye and long, raven hair, he stands alone among them, impatient of the artificial restraints under which they and their master work. He cares not for the master, however great, but with sturdy independence paints in his own way. Some ridicule and stand by jeering at his work. Stung by the criticism, the dauntless youth retorts, as he looks upon the picture of Delaroche and the pupils about him: "Do you think I concern myself about your honey and butter figures?" What astonishment, almost fear, must have filled the studio as these haughty words echoed through it. At last, Delaroche, overcome with wonder, and feeling that there was something here that he did not understand, says to him: "Go your own way; you are so new to me that I wish to have nothing to say to you." He leaves the studio, and though Delaroche afterward requested him to return and study there without paying him anything, he never came back for any considerable time again.

Now comes that sad period which all artists of genius must pass through, but which lasted, alas, the greater part of his life with Millet. He must turn his pictures into bread. None will buy the work his genius impels him to paint, and so he paints in the manner of Watteau and Boucher, which he despises, and sells his pictures for twenty francs that he may not starve. He returns to Gruchy and paints a portrait of his father which is accepted at the salon in 1840, but attracts no attention. Then he paints portraits for a while at thirty francs apiece. In these earlier times he paints Bacchantes and many allegorical and nude subjects; also a temptation of St. Anthony. His "Oedipus taken from the tree," was a picture of great power in drawing, but little thought. But though his pictures from the nude were beautiful, he never painted an impure or unhealthy thought. These pictures were sold, and having gotten together nine hundred francs he returned to Paris, where he heard someone say: "Millet, who paints only naked women." This wounded him to the quick, and from that moment he resolved to paint from the nude no more, but to depict those rustic scenes which he loved, at whatever cost of ease and comfort of living. Millet was at this time an extremely handsome man. His eyes were dark, and flashed out from deep recesses, under straight black brows. His face was surrounded by masses of wavy black hair, and a dark beard. His nose was delicate, a little aquiline, and with a peculiar, high-arched nostril, which might well quiver with disdain or expand with sensibility as he drew the deep breath of heartfelt admiration. He had the physique of the peasant who lives in the open air, and at the same time that royal carriage which belongs only to kings of the earth, whether in the realms of government or of art.

Two wonderful things came to Millet at this period of his life. One was the intense love and admiration of the critic Sensier, called "the last of the enthusiasts," and the other was the revelation to him that he was called to portray the scenes of peasant life, those plain and homely scenes which he loved, and in the midst of which his strange boyhood had been passed. As Sensier justly says, the farm peasant represented to Millet human nature. He found in him the strongest traces of the real nature of man, and the most truthful representation of the labors and sorrows of humanity. In seeing the peasant family at work in the fields, with anxious soul and resigned attitude, with gesture slow and sad, one will turn again toward Millet, and he who has understood him will say to himself: "There is a painter who gives life to the humble, a poet who exalts grandeur unobserved, a man of goodness who encourages and consoles."

At this time the cholera came to Paris, and Millet and Jacques left the city and went to the little hamlet of Barbizon, near the forest of Fontainebleau. Here begins the greatness of Millet's career. He was living amidst rocks and cliffs, grand old trees and verdant fields, and he was poor—very poor—and like the peasant he painted, he himself worked in the garden at Barbizon with all the toil of the farmer, that he might support his wife and little ones. Here he learned to make "the trivial become sublime." While so laboring, and therefore filled with warmest sympathy for the tillers of the soil, he made a masterly series of sketches of the peasant life, which in power and truth is quite comparable to Holbein. It was here that the inspiration came upon him to paint that wondrous picture of the sower, though the peasant who was its subject belonged not to sunny Barbizon but to the storm-swept coast of Cherbourg and Gruchy. So powerful was the impulse to paint it that the artist did not perceive until after it was done, that his canvas was too small, and would not contain

the figure, full of vastness and mystery, to which his genius had given birth. He must paint it again upon a larger canvas.

"The Sower" was exhibited at the salon of 1850-51, and called forth a long and almost rapturous criticism from Theophile Gautier. Indeed, this picture, so full of grandeur and mystery, could not fail to make a stir as it hung among the soft, smooth and vapid paintings then so much the fashion in France. He exhibited at the same salon "The Binders," a picture whose poetry and simplicity places it nearly upon an equality with "The Sower." The subjects chosen by Millet were almost always sad; if not deeply sad they were at least pensive, and never gay. Millet said there was no gayety in labor, though much grandeur, true humanity and great poetry, and to him the highest joy was calm, silence, rest. Man's normal condition seemed to him fatigue. Hence he gave to the laborer at his noonday rest an utter abandon, a most entire and absolute relaxation of every muscle in his toil-worn frame, as though the whole soul were given up to the luxury of not working. But how if there be no soul? If perchance long years of hard toil, day after day digging up and turning over the clods of the earth, have made almost a clod of what might have been a man? What then will his noonday rest be like? Alas the truth of such a life is terrible, and Millet tells it without fear. In the "Man with the Hoe" and the "Vineyard Worker Resting," the whole story appears. These peasants scarcely seem men at all, but rather some baleful product of the black ground, some horrid shape of darkness, ignorance and terror. The open, panting mouth and fallen jaw, the half-closed eyes, the matted hair belong rather to one of the lower animals than to man. They have not intelligence enough to enjoy their brief time of rest. They stop work because they must, and iron necessity will make them work again as soon as the relaxed muscles may once more be stiffened to their task.

These haunting and terrible pictures really frightened the Parisians, and the "Man With the Hoe," especially, called forth a storm of indignation. It is no wonder, for, as Millet himself says, art was at this time an accomplishment, and not the conscience of society as it was in the middle ages. The voluptuous Parisians looked for unvailed female beauty, and for scenes of Arcadian poetry, wherein rambled Phyllis and Corydon, and lo, the grimy peasant, the gaunt specter from the bowels of the earth confronts him with brutish, lowering brow. His dream of Arcadia is rudely shattered, and with shuddering he fears this savage may indeed exist in the fields of France, and he is the more indignant the more the unwelcome truth forces itself upon him. Yet Millet gave to these laborers their due meed of power. They are neither helpless nor complaining. There is a vastness of strength in their solid frames. During sixty years of their lives they will be able to force their bread from the hard earth. They will ask and receive no aid. Their defiance, if it be defiance, is all unconscious, and the guilty conscience, of wicked Paris put into their open, gaping mouths the words of menace and danger, which their own torpid brains would never have prompted. In 1855, at the Universal Exposition, he exhibited a lovely picture called the "Grafter." It is a young peasant, who bends over a stock wherein he is ingrafting a tender cutting. Beside him stands his strong and comely wife, holding in her arms their little child. She watches him with affectionate interest, and even the infant looks at him eagerly as though already seeking to grasp the mystery of the labor. Behind them is the long, low wall of their cottage, bathed in yellow sunshine, and warmly nestling under the wing of the thick, thatched roof. Some trees throw a grateful shadow over them. There is in the whole scene, not only the sunshine of summer, and the cool shade of green trees, but that tender sunshine of domestic love, that thought of peaceful shelter from the fierce heat of life, in the calm shade of a happy home. So does the inward and spiritual always pervade the outward and material in Millet's pictures. More exquisite and touching still is his wonderful picture called the "Potato Planters," now belonging to Mr. Quincy A. Shaw, who lives near Boston. Words can hardly describe the poetry, pathos and rich beauty of this picture. And yet, the scene is so simple. Behold! Two peasants working in the field—the man and his wife. He carefully lifts the earth with his clumsy hoe, and holds it up while she throws in the little broken fragments of potatoes. Both are bending over in their toil and their faces are not fully seen, but earnestness, faith, hope and strength appear in every line of the two strong young figures. There is tenderness, too, for he is laboring for her and their child, and she is helping the man she loves. And yonder on the left, under a green willow tree, sleeps their little baby, with none to guard its infant slumber, save the old donkey who seems almost to sleep, too, in the shade, with his long, nodding ears hanging over the sleeping child. Far away and all around them stretches a sunlit plain, fairly alive with sunshine, and here and there rises the smoke from some distant hamlet. Perhaps one of the cottages is the dear though humble home of this loving family. The whole coloring is vivid. The sunlight seems to have penetrated everything, so that it makes even the hard labor radiant. The landscape is equal in power and truth to the figures. It cannot be told which is the more fascinating, the outward beauty of the scene, with its thought of the bountifulness of nature and the goodness of God, or its sweet meaning of the poem of love and labor sung by the simple peasants and their innocent babe.

The "Grafter" was sold to the artist, Rousseau, at this time a warm friend of Millet, for four thousand francs, and this absurd sum for such a picture pleased the artist much, even brightened his whole life for a while. But only artists, and a very few with the true artistic feeling, understood his pictures at all. Hence they did not sell; and in the year 1856 Millet found himself in the very extremity of poverty. He knew not where his bread was to come from, or with what to light his fire. Yet he remains silent, uncomplaining, and works on in all truth and patience. Some of his greatest works were born in this time of suffering. Millet is one more striking proof of the truth that there is no greatness in man without suffering and toil. As Tennyson in sadness produced "In Memoriam," and as Longfellow wrote his greatest poems after suffering the agony his wife's death caused him; as Milton in his blindness produced "Paradise Lost," and Scott, in pain and sorrow, wrote "Ivanhoe," so did Millet from the depths of poverty, hunger and cold, bring forth the choicest, the

immortal treasures of modern art. At this time he painted the "Angelus" and the "Gleaners," and the mysterious pictures of the shepherd's life. Perhaps nowhere is the weirdness and mystery of Millet's genius more notable than in these shepherd scenes. He seemed to grasp the deepest possible meaning of the solitary shepherd's life. Sensier well says that to Millet "the shepherd is not a countryman, made like the laborer or other worker in the fields; he is an enigmatical person, a mysterious being; he lives alone, his sole companions his dog and his flock. From Easter to Martinmas he sleeps in the open air, in a movable hut, which makes him the nightly guardian of his flock. In winter he goes over the wet ground to find the least spear of vegetation; in spring he helps the ewes when they bring forth lambs, and cares for them. He is the guide, the friend, the physician of the flock. Moreover he is contemplative. He searches the stars, watches the sky and predicts the weather. All atmospheric life is familiar to him." Millet's moonlight picture, of the shepherd at the fold with his sheep, is wonderful. So also is the "Shepherd Bringing Home his Flock at Sunset," which is one of his greatest works. There is not in these pictures much of the careless, happy spirit of Virgil's shepherds, though Millet loved the Georgics, but rather do they tell of the thoughtful care of the pastor, uneasy about his flock of ruminants, the human, real spirit, which modern art loves to describe. Many great pictures were produced by the master at this time, yet, in 1859, his "Death and the Woodcutter" was actually refused admission at the salon, and in 1861 three of his pictures which were exhibited, were severely criticised by some, although by others likened to the frescoes of the old Florentines. Gerome said of him: "He is a Jupiter in sabots." But if it had not been for the enthusiastic praise of his friends, and the artists who understood him he would have been tempted almost to doubt the truth of his art, so fierce was the storm of adverse criticism. He was treated almost as a criminal at the bar, and while his artist soul was racked by this torture, his domestic life was borne down by the weight of bitter poverty, and the pain of failing health, which the strain upon his nerves had caused. Nevertheless he stands like a rock, which winter's rudest storms may never shake. His resolute, defiant attitude is well shown in a photograph taken at this time, of which Sensier says: "He is on foot, erect, in sabots, his back turned toward a wall, his head raised, his body straight and proud, his leg advanced like one who weighs himself well, with hat in hand, hair thrown back and his glance as if fixed upon something threatening. One might take him for one of those enthusiastic peasants, victims of our civil wars, who, conquered, looked upon death without growing pale." Indeed he looks in this picture like a peasant chief about to be shot. But though he remained resolute and defiant, he kept silent. He did not storm and rage, neither did he complain, unless in private talk with his friends, but calmly awaited the time when the truth of his art should vindicate him.

[To be continued.]

National Association of Master Plumbers.

THE fifth annual convention of the National Association of Master Plumbers of the United States of America was held at the Grand Pacific Hotel on Tuesday, Wednesday and Thursday, June 21, 22 and 23, 1887.

The convention was called to order at 10:30 o'clock A.M., Tuesday, June 21, in the ladies' ordinary of the Grand Pacific Hotel. Mr. James Allison, of Cincinnati, president, in the chair; Mr. John Trainor, of Baltimore, vice-president, and Mr. Thomas McNeil, of Cincinnati, secretary.

The delegates were welcomed by Mr. Andrew Young, of Chicago, in the name of the Association of Master Plumbers of Chicago, whose guests the visitors were during their stay. Forty-one cities and twenty-one states were represented by 164 delegates.

Mr. William Harkness, Jr., of Philadelphia, offered the following, and moved that it be referred to the appropriate committee, which was agreed to:

PHILADELPHIA, June 10, 1887.—At a meeting of the Master Plumbers' Association of the city of Philadelphia, held on the above date, the following resolution was adopted: *Resolved*, That the Master Plumbers' Association of the city of Philadelphia request the National Association of Master Plumbers, in convention at Chicago, to insist that the plumbers of the country be classed as dealers by the manufacturers of terra-cotta pipe.

The report of the Executive Committee showed that four meetings had been held during the year. At these the strike among the journeymen in New York was considered; the traveling expenses of Executive Committee were ordered paid; the action of the authorities in Washington, D. C., in regard to local plumbing and drainage regulations, was acted upon.

The following resolution was passed by the Executive Committee:

Resolved, That the National Association, through its executive head, appoint a member of this organization in every city and town in the United States, under its jurisdiction, for the purpose of keeping a record of all dealers or manufacturers or master plumbers violating any of the protective resolutions of this association, said committee to report to the chairman of protection.

The following recommendations were offered by the Executive Committee:

Resolved, That the National Association of Master Plumbers approve of the course pursued by the New York Master Plumbers' Association in the long strike with the journeymen plumbers of New York against the boys of America being permitted to learn the plumbing trade, and reaffirm the declaration of principles of the National Association of Builders, as follows:

"That the absolute personal independence of the individual to work or not to work, to employ or not to employ, is a fundamental principle, which should never be questioned or assailed; that upon it depends the security of our whole social fabric and business prosperity, and that employers and workmen should be equally interested in its defense and preservation. While upholding this principle as an essential safeguard for all concerned, this association would appeal to employers in the building trade to recognize that there are many opportunities for good in associations of workmen, and while condemning and opposing improper action upon their part, they should aid and assist them in all just and honorable purposes; and that while upon fundamental principles it would be useless to arbitrate, there are still many points upon which conferences and arbitrations are perfectly right and proper, and that upon such points it is a manifest duty to take advantage of the opportunities afforded by associations to confer together, to the end that strikes, lockouts, and other disturbances, may be prevented.

"When such conferences are entered into, care should be taken to state clearly in advance that this fundamental principle must be maintained, and that such conferences should only be competent to report results in the form of resolutions of recommendation

to the individuals composing the various organizations participating, avoiding all forms of dictatorial authority.

"That a uniform system to apprenticeship should be adopted by the various mechanical trades; that manual training schools should be established as part of the public school system, and that trade night schools should be organized by the various local trade organizations for the benefit and improvement of apprentices.

"3. This association earnestly recommends all its affiliated associations to secure, as soon as possible, the adoption of a system of payment by the hour for all labor performed, other than piecework or salary work, and to obtain the cooperation of associations of workmen in just and equitable arrangement."

The report of the Executive Committee, as well as the resolution submitted by Mr. Harkness, was referred to a special committee of five on resolutions.

The report of this committee, submitted by Mr. Hopkins, was as follows:

1. By the Philadelphia delegation, requesting that master plumbers throughout the country shall be recognized as dealers by the manufacturers of terra-cotta pipe, amended so as to read "master plumbers of the national association," and "also, by the manufacturers of plumbing material."

2. By the president, recommending a paid board of officers.

3. By the president, recommending local organizations to provide for the education of the coming plumber by the establishment of trade schools, reading rooms, lectures, etc.

4. By the president, recommending that contracts for plumbing work be made direct with the owner or architect.

5. By the executive committee, approving of the action of the New York master plumbers in their "battle for the boys."

6. By the executive committee, reaffirming the declaration of principles adopted by the National Association of Builders.

7. By the executive committee, recommending the appointment of a committee for the purpose of establishing purchasing agencies to supply goods at the lowest market rates to members of this association.

8. By the executive committee, recommending the appointment of a member of this association in every city and town for the purpose of keeping a record of all dealers, manufacturers and master plumbers violating any of the protection resolutions of this association.

The report was fully discussed and adopted, with the following amendment: In Sec. 1, "all plumbers' materials" was substituted for "terra-cotta pipe."

President Allison made an eloquent and able address, covering the past and outlining the future work of the association.

The reports of vice-presidents in charge of state organization and local associations were received. These reports show the plumbers to be well organized, and the consideration of state laws governing sanitation, the teaching of the plumbing trade and the insistence by master plumbers upon the preservation of all individual rights to be general. New York has just ended a contest with unions lasting ten months, showing that plumbers are strong advocates of American liberty as against imported and un-American interference with the lawful rights of the individual.

Mr. John J. Weaver, of New York, read a valuable essay on "Trades' schools, and technical education in their relations to the plumbers of the future."

On motion, the essay received the unqualified indorsement of the National Association, with instructions to local associations to put its recommendations into practical effect.

A great deal of time was given to the discussion of the apprenticeship question, and the report of that committee, as finally adopted, is as follows:

CHICAGO, June 21, 1887.

To the President, Officers and Members of the National Association of Master Plumbers.

GENTLEMEN,—Your apprenticeship committee herewith submit for your consideration the following rules and regulations in reference to apprentices, and request they be recommended for adoption by the various local organizations:

1. The term of apprenticeship at the plumbing trade shall be five years.

2. No boy shall be taken to learn the trade until he has attained the age of 16 years.

3. Each employer shall be required to make a return to the apprenticeship committee of a list of the boys in his employ who are apprentices, with their ages, places of residence, time of commencing at the trade, etc., and a general record of each boy.

4. The secretary of the apprenticeship committee will keep an apprentices' record, in which will be recorded the name, address and age of every apprentice, with date of commencing and discontinuing work with each employer.

5. For each apprentice so recorded the secretary shall issue an apprentice certificate to be sent to his (the boy's) employer to be retained by him so long as the apprentice is in his employ. When the apprentice takes service in another shop the certificate is given to his new employer to be filled in with the date of commencement (of service) and so on until the certificate shows that the proper time has been served.

6. Any boy wishing to learn the plumbing trade will be required to send his name and address to the secretary of the apprenticeship committee, who will notify the applicant when to appear before the committee for examination. Each applicant must have a letter of recommendation from a member of the Master Plumbers' association.

7. A beginner at the trade will be required to work six months on probation, at the end of which he shall appear before the committee for re-examination, and if found worthy his certificate shall be issued, he shall be recognized as a regular apprentice, and the time already spent at the trade shall be allowed on his certificate.

8. When the five years shall have been served, the apprentice shall be presented by the association with a diploma, showing the date of service and signed by the president of the association and by the apprenticeship committee.

9. Boys having a diploma from any trade school shall be allowed a deduction of the last year from the term of apprenticeship.

10. It shall be the duty of each employer when he finds it necessary to dispense with the services of any apprentice to report to the secretary the name of such apprentice at least one week before laying him off.

11. It shall also be the duty of the members of this association to apply to the committee when in need of apprentices.

12. No boy shall be allowed to join any trade or labor organization during his term of apprenticeship under penalty of forfeiture of his certificate.

13. If a master plumber is compelled to discharge an apprentice for want of work, it should be his duty to find him employment with another who has work for him and can teach him the trade.

Respectfully submitted,

WM. HARKNESS, Jr., of Philadelphia, Chairman.

J. F. MCCONNELL, of Baltimore.

J. J. HAMBLIN, of Chicago.

Apprenticeship Committee.

The Executive Committee of the Manufacturers Association of Metal Workers of the United States, Messrs. N. O. Nelson, E. C. Worchester, and W. T. Doyle, met the committee of the National Association. They stated that while in full accord with the association they deemed the modification of the Baltimore resolutions to allow them to sell goods to some of their customers at an agreed price.

The committee claimed that the life of the plumbing business depended upon the strict observance of the resolutions.*

*The Baltimore resolutions prohibit any manufacturer to sell goods to any other than a properly licensed plumber.

That the manufacturer should not sell at retail, and that the committee believed that when the consumer bought goods and hired any plumber he pleased to fit them up it fostered an irresponsible class of plumbers, and entailed a loss to the legitimate plumber.

The result was that the committee did not modify the resolutions, and the manufacturers agreed to abide by the resolutions.

Mr. Weaver submitted a resolution, asking the Executive Committee to consider the feasibility of altering the constitution so as to admit Canadian associations, but it was voted down.

The election of officers resulted as follows: President, John Byrns, of New York; first vice-president, John Traynor, of Baltimore; recording secretary, Henry G. Gabay, of New York; treasurer, Mortimer J. Lyons, of Brooklyn; corresponding secretary, Walter T. Hudson, of Brooklyn; financial secretary, Enoch Remick, of Philadelphia; sergeant-at-arms, David J. Collins, St. Louis; executive committee, Col. George D. Scott, New York; E. J. Hannan, Washington; Jeremiah Sheehan, St. Louis; William Harkness, Jr., Philadelphia; Rupert Coleman, Chicago.

The committee occupied three days, ending with a banquet at the Grand Pacific, at which about four hundred delegates and guests were present. Many wives and daughters of delegates were in attendance, and took part in the magnificent and varied entertainment provided for the visitors by the association. The weather was exceptionally fine, and assisted in making enjoyable one of the most interesting and well-conducted conventions ever held in Chicago.

The National Association will meet next year at Boston, Mass.

The Chicago Builders' and Traders' Exchange.*

At a meeting of the Master Masons' and Builders' Association, June 29, by a vote of 41 to 30, it was decided to appoint an arbitration committee, with instructions to stand firmly by the code of principles of the association, and to require their recognition by the bricklayers before proceeding in any way with the work of meeting the union with a view to settle the existing trouble. When this point was reached, and the code of principles fully concurred in by the bricklayers, the committee was instructed to proceed, with full power to act in effecting a settlement.

The committee appointed is composed of Joseph Downey, George C. Prussing, George Tapper, William O'Brien and Charles W. Gindele.

The members of the Arbitration Committee of the bricklayers union are A. E. Vorkeller, John Pearson, P. J. Meinter, C. J. Lindgren and Fred Rebusch.

Upon the appointment of the Arbitration Committee by the master masons, the following correspondence took place between that association and the president of the union:

A. E. Vorkeller, President United Order of American Bricklayers and Stonemasons:

SIR,—Chicago Master Masons' and Builders' Association has this day appointed a standing committee of arbitration of five of its members, with full power to act for and in behalf of this organization in settlement of any and all differences existing. You have been informed of the platform and code of principles adopted by this body. On these it stands. All other questions may properly be arbitrated. Please inform this body whether your committee has been appointed with full power to bind your organization by joint action with us. If so, our committee is ready, and shall be pleased to meet your committee at the earliest time convenient for the selection of an umpire and arrangement of preliminaries. The Arbitration Committee appointed by this association consists of Messrs. George C. Prussing, George Tapper, William O'Brien, Charles W. Gindele and Joseph Downey. Respectfully,
JOSEPH DOWNEY, President.
H. MUELLER, Secretary.

In reply to this communication, President Vorkeller sent to President Downey the following acceptance of the proposition:
Joseph Downey, President.

DEAR SIR,—Your communication notifying me that your association has appointed a committee of five to meet a like committee from our organization for the purpose of settling, if possible, the present lockout, is at hand. In reply will say that we await your convenience, and will hold ourselves in readiness to meet your committee at any time and place you may appoint. Yours respectfully, A. E. VORKELLER, President.

The time and place of meeting was fixed by President Downey in a note to President Vorkeller, as follows:

A. E. Vorkeller, President.

SIR,—Your communication received, and would say in reply that our committee will meet your committee at 10 o'clock tomorrow morning at the Grand Pacific Hotel. Respectfully,
JOSEPH DOWNEY, President.

The committees met as appointed, June 30, the first business done being the selection of an umpire, having the casting vote in case of a disagreement. After three days' conference, and the selection of a number who declined to serve, the joint committee, July 2, decided upon Judge Murray F. Tuley, chief justice of the Circuit Court of Illinois, and a man of undoubted judicial ability.

THE ARBITRATION COMMITTEE'S REPORT.

After being in session nearly a week the arbitration committee, July 8, adopted the following report:

To the Union of the United Order of American Bricklayers and Stone Masons, and to the Master Masons' and Builders' Association of Chicago:—The joint committee of arbitration, composed of an arbitration committee of five from each of your organizations, with Judge M. F. Tuley, unanimously selected as umpire, have concluded their labors and respectfully report:

That recognizing the fact that organizations of employés and employers, like these from which this committee originated, do exist and have become important factors in our industrial society, and that they will, in all probability, continue to exist, we do not attempt to determine whether the motives or basis of either organization was right or wrong. They appear to be a necessity arising out of the present conditions of society, and, while such combinations keep "from violence or show of violence," no great danger need be apprehended. Nor did we attempt to determine which organization was to blame for the present paralyzed condition of the building industry of this great city. We recognized the fact that the two organizations between which there should be many "bonds of sympathy and good feeling" were carrying on a bitter war with each other, by which many thousands of men were deprived of work, much suffering and privation brought upon innocent parties, and immense pecuniary losses daily sustained, and we determined, if possible, to reconcile the differences and place the relations of the two organizations upon a basis by which strikes, lockouts, and other like disturbances might in future be avoided.

*Continued from May Intermediate News Number, page 69, Vol. IX, No. 7, and June Number, page 81, Vol. 9, No. 8, as a complete record to date of the important measures taken by the building interest of Chicago in the direction of a permanent settlement of labor disturbance and the eradication of disturbing elements.

We discussed the relations of the contractor and the workmen, and found much in which they had a common or joint interest, and were mutually concerned. We endeavored to discuss and settle each trouble and grievance in a conciliatory spirit, not in way of compromise, to give and take, but in a spirit of fair play and upon just and equitable principles.

We found that the main cause of trouble was in the separate organizations endeavoring to lay down arbitrary rules for the regulation of matters which were of joint interest and concern, and which should be regulated only by both organizations by some species of joint action. We therefore determined upon and submit herewith a project for the institution of a joint standing committee for that purpose. The article herewith submitted provides for such a standing committee, to be elected annually in the month of January, defining its powers and duties, we request shall be incorporated into the constitutions of each association.

This joint committee will be constructed of an arbitration committee of five members from each organization (the president of each being one of the five) and an umpire, who is neither a working mechanic nor an employer of mechanics, to be chosen by the two committees. This joint committee is given power to hear and determine all grievances of the members of one organization against members of the other, and of one organization against the other. To determine and fix all working rules governing employer and employé such as:

1. The minimum rate of wages per hour.
2. The number of hours of work per day.
3. Uniform pay day.
4. The time of starting and quitting work.
5. The rate to be paid for night and Sunday work, and questions of like nature.

And it is also given power to determine what number of apprentices should be enrolled so as to afford all boys desiring to learn the trade an opportunity to do so without overcrowding, so as not to cause the coming workman to be unskilled in his art or the supply of labor to grossly exceed the demand therefor. It is also given exclusive power to determine all subjects to which both organizations may be interested, and which may be brought before it by the action of either organization or the president thereof.

It becomes necessary in order that all questions and grievances which the committee has settled, to make the constitution and by-laws of the organization conform thereto, and to powers given to future joint arbitration committees, that some changes should be made in such constitution and by-laws.

The adoption by the Master Masons' and Builders' Association of the article for the joint committee, recommended, together with some slight changes in the constitution, will be sufficient.

The United Order of American Bricklayers and Stone Masons will be necessitated to make changes in its constitution and by-laws to make the same consistent with and to conform to the spirit and intent of the powers and duties conferred on the joint committee; and among other things the officer heretofore known as the walking delegate is to be known hereafter as the collector, and all the objectionable duties and powers of the office have been done away with.

The steward will remain guardian of the men's interests and mediator for them; his arbitrary powers are taken away.

The interests of the members of the union are protected by the foreman being required to be a member of the union, but he is restored to his position as the employé of the contractor, and, while so employed, is not subject to the rules of the union.

The eight-hour day has been conceded to the workmen. It is in accordance with the state and, we believe, in accord with the spirit and progress of the age.

The question of pay day, whether on Saturday or on Monday, was not considered a question of vital importance, but, it being one of the questions left to the umpire, he decided that, inasmuch as Tuesday has been the pay day with the principal contractors in the trade of this city for more than twenty years last past, and, as experience in other trades and occupations has demonstrated that the pay day of Monday or Tuesday has worked more beneficially to the workmen and their families than the Saturday pay day, and, inasmuch as contractors ought not to be required to change the pay day in the midst of the working season, having, presumably, made their pecuniary arrangements to meet the Tuesday pay day, he would name Tuesday as the regular pay day until the same should, if desired hereafter, be changed by the joint committee on arbitration.

We have settled the differences between the two organizations, while every inch of the ground has been fought over, yet having the task assigned us we in good faith determined to do everything that was fair, just and honorable to accomplish our object. We feel we have succeeded without compromising the honor, the rights or the dignity of other organizations, and hope that we have succeeded in establishing a basis upon which all future troubles may be settled and probably be prevented. We respectfully ask your adoption of this report, and the article as to the joint arbitration committee by immediate action, to the end that work may be commenced on Monday next, it being agreed that neither organization shall be bound by its action if the other should refuse to take similar action.

A. E. VORKELLER,
P. J. MINNITER,
JOHN PEARSON,
THEODORE DRIEBACH,
CHARLES J. LINDGREN,
GEORGE C. PRUSSING,
JOSEPH DOWNEY,
GEORGE TAPPER,
WILLIAM O'BRIEN,
CHARLES W. GINDELE,
M. F. TULEY, Umpire.

Arbitration Committee for the U. O. A. B. and S. M. Association.

The report was submitted to a full meeting of the union, July 8, and was ratified by the assembled workmen, July 9. The Master Masons' Association held a meeting and likewise ratified the decision of the arbitration committee.

AN important bill, presented to the Minnesota Senate by Senator Whiteman, was for a state school of manual training and industry at Duluth. Senator Whiteman, according to the *St. Paul Globe*, made an eloquent plea for it, and argued that it was an institution much needed, and as Duluth had so far asked for nothing, the state might consent to allow the Zenith City to have one institution, but his reasons failed, because every other senator wants a state institution, too.

A CHANNEL has been cut through from Lake Ballona, Los Angeles county, Cal., to the ocean, but further work toward making a harbor of the lake has been suspended until the arrival of piles, which are daily expected. Large suction pipes have been laid from the lake over the hill into a deep valley, where a steam dredger will be set to work, and the débris conveyed by suction pipes and be used as filling for the road, which has been graded for five miles toward Los Angeles.

THE Chicago Laundry Dryer Company manufacture a laundry drying stove, the heat of which is utilized in a drying closet attached. The simplicity of the thing is its chief recommendation, as well as its size, for dwellings and flats. Its capability for doing the work of a laundry in the most complete manner; boiling clothes; furnishing hot water; heating sadirons, and drying clothes at the same time, and at a comparatively small cost, is its peculiarity. While this stove is perfectly adapted to hotels and public institutions, the attention of the manufacturers has been given, up to the present time, mainly, to sizes for apartment houses and dwellings, in numbers of which, both in Chicago and New York, they have met with general approbation. The attention of architects and builders is invited to this new laundry device, and all questions in regard to it will be cheerfully answered by the manufacturers.

Association Notes.

CHICAGO ARCHITECTURAL SKETCH CLUB.

At the regular meeting of the club, June 20, the decision of the competition adjudicating committee was announced regarding the country stable competition. In this "Horse" (W. B. Mundie) received first place; "Chic" (O. C. Christian) second place; "Horseshoe" (C. B. Schaefer) third place. Mr. Jenney's choice for third place was an imitation sketch submitted by T. Hazelton.

The remainder of the evening was devoted to the reading of an interesting paper by F. L. Linden, on "Interior Decoration," and its discussion. The club have inaugurated a series of sketching trips, that which will prove most memorable to those who participated, being a trip to the beautiful suburb of Riverside on the Des Plaines river on Sunday, June 19. Eleven of the leading members took an early train, which met with an accident before the city limits were reached, colliding with a freight train. The car in front and that behind the one occupied by the draftsmen were made into kindling-wood, but they escaped with a few scratches and a bad shaking up. The scene, as described by one of the number, was "interesting." Open windows were in demand for a few seconds. Mr. Williamson jumped out and landed upon a man who had been killed a moment before. He found that, in his hurry to escape, he had gathered up the sketching blocks, camp stools, coats, etc., that happened to be nearest, but on examination not one article belonged to him. After some anxiety regarding the safety of different members of the club, and a roll call to which all answered, the wrecked car was entered and the sketching blocks, etc., that had been left were secured. The time of waiting for another train was spent in sketching the wreck, several very graphic drawings being made, and if lines were somewhat uncertain, showing a slight nervousness on the part of the artist, it is no reflection upon the bravery of the sketchers. The only damage reported was a broken umbrella, and it is understood that the C. B. & Q. Company, upon whose line the accident occurred, promptly sent the owner five dollars to replace it. The rest of the day was pleasantly spent in sketching. The party was added to by two members who missed the train, one of whom took a later train, and the other walked out. This made the fatal number thirteen, and the superstitious may thus account for the accident. The club is to be congratulated upon their narrow escape. The loss of a dozen of the best draftsmen in Chicago would have been serious in these days when thorough, all-round draftsmen are so hard to find.

KANSAS CITY ARCHITECTURAL SKETCH CLUB.

The club has now twenty-four active members, an increase of eight, and three applications. The Kansas City Society of Architects have given the club the use of their rooms. Semi-monthly meetings are held, and art is aided by a liberal spread of refreshments in making each meeting attractive. The club contemplates an exhibit of architectural drawings upon the occasion of Missouri state association convention, to be held in Kansas City, January next. The club is now a permanent success, and will be a factor in the architectural progress of the city.

Our Illustrations.

Residence at Aurora; Alfred Smith, architect, Chicago.

Synagogue, Chicago; Wm. Strieman & Co., architects.

Church at Lake Forest, Ill.; W. W. Boyington, architect, Chicago.

United States court house, postoffice, etc., Louisville, Ky.; M. E. Bell, supervising architect.

Union Depot, Leavenworth, Kansas; Henry Ives Cobb and Chas. S. Frost, architects, Chicago.

Building for the Dakota Loan and Trust Company, Watertown, Dak.; W. L. Dow, architect, Sioux Falls.

Study for proposed addition, Ann Arbor High School, Ann Arbor, Mich.; Jenney & Otis, architects, Chicago.

Stable Competition, Chicago Architectural Sketch Club: First place; W. B. Mundie; second place, C. O. Christian.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Robinson Terrace, Detroit, Mich.; Wm. Scott & Co., architects.

Residence of E. Reese, Baltimore, Md.; H. P. Wilson, architect.

Residence of Hon. H. P. Denman, Washington, D. C.; Fuller & Wheeler, architects, Albany, N. Y.

Residence for Edward E. Ayer, corner State street and Palmer place, Chicago; Burnham & Root, architects. Walls are of Lake Geneva cobble stones; split and laid irregularly; roof is of red tile.

La Salle Avenue Baptist Church, Chicago; S. S. Beman, architect; frontage 75 feet, depth 140 feet, front of Bedford store. The front is chiefly occupied by parlors, in the rear of which is the main audience room; Sunday-school above parlors; cost, furnished, \$36,000.

Correspondence.

Editors *Inland Architect*:

CHICAGO, June 17, 1887.

The uniform beauty of your advertising pages has always been a source of pleasure to us, and upon receipt of each publication we have specially noted the general excellence of your paper. We cannot, therefore, complain of any failure upon your part, but we have a grievance, and crave your columns to state it. We refer to the advertisement of the Illinois Terra Cotta Lumber Company, occupying page No. 7 of the May issue, in which they gave as one of their references the Pullman Building,

Chicago, which they claim is "among the buildings in which the above has been used," referring to their complete system of fireproofing buildings. That this is quite a misleading statement and one well calculated to deceive the uninformed, the following copy of letter from Architect Beman will clearly show:

S. S. BEMAN, ARCHITECT, PULLMAN BUILDING,
CHICAGO, June 19, 1885.

E. V. Johnson, Esq., Manager Pioneer Fireproof Construction Company, Chicago.

DEAR SIR,—In the Pullman Building and elsewhere I have used large quantities of your material for partitions, floor arches and the outside and party walls of dwelling houses. Your materials have always given satisfaction, and I have to thank you for your prompt and energetic manner of executing the contracts under my direction.

Yours truly,
S. S. BEMAN.

The total amount of our contract for fireproofing the Pullman Building was \$50,927, and the work consisted of all fire-clay, hollow tile floor arches, suspended ceilings, roof and column covering, and the entire fireproof partitions of the building, excepting perhaps half a dozen short walls in the attic stories, which were put in place by workmen in the employ of the Pullman company some time after our entire contract had been settled and paid for, porous tiles being used for this purpose and only for this purpose in any portion of the building. We have been in the business of fireproofing in Chicago for the past fifteen years, and have not yet found it necessary or expedient to claim the merits of others as our own, and we do not propose to allow other parties that privilege at our expense without at least a faint protest. Very truly yours,

PIONEER FIREPROOF CONSTRUCTION COMPANY,
Per E. V. JOHNSON, Manager.

Mosaics.

A new management now has control of the *Lumber Trade Journal* of Chicago that promises to make it one of the strongest trade journals in the country. The incorporators are George W. Hotchkiss, one of the best known and able writers upon lumber topics in the country; Walter C. Wright, a young man of great promise as a journalist, and already so well-known and popular among lumbermen as to hold the office of secretary of the National Association of Lumber Dealers; E. J. Hotchkiss and W. W. Hoyle. The field occupied by the *Lumber Trade Journal* is one difficult to fill, but the requirements of which are recognized by its able managers, whose peculiar talents and practical knowledge will place it beyond competition in its particular province.

SOME system of constant artificial ventilation for sewers is, in the opinion of some of the most competent authorities, absolutely necessary, if we would be thoroughly rid of the deadly pest of sewer gas. Alanson Sibley, for ten years a member of the Detroit Board of Sewer Commissioners, advocates for this purpose a furnace and chimney of strong draft, at the mouth of the main sewer, to create a constant suction of the gases away from the houses and into a consuming chamber in the furnace. Mr. Holbrook, of the Sanitary Exhaust Ventilator Company, of Chicago, was not far wrong in a statement made, which may yet become a fact, that every street corner gas lamp could be made to serve as a sewer ventilator, and that without disturbing the production of light.

ONE of the most important and appreciated additions to the railway facilities of the West, is the new line of the Wisconsin Central Railway Company from Chicago to St. Paul. Aside from its advantages as a through route, its rendering accessible the lake region of northern Illinois and southern Wisconsin, is making this road well known and popular. Hundreds of Chicago people, who have no time for long vacations, are this year taking advantage of the direct route of this road to these lakes, where rest and recuperation are secured fishing in their waters, and resting in the groves that surround their banks. One of the most beautiful of the many fishing resorts is at Antioch, two hours' ride from the city, and a day spent among the network of lakes which surround the town, will make the visitor long to "go again," and remember the "Wisconsin Central."

THE largest contract for hollow tile fireproofing ever let for a Chicago building has just been secured by the Illinois Terra-Cotta Lumber Company, of Chicago. Their bid represents the lowest figures in a close competition and approximates \$156,000. The specifications call for porous hollow tile partitions, floors, column casings and a special tile for covering ten large trusses in the auditorium. Beside this all brick walls will be fired with porous hollow tile, the outside walls to prevent dampness and those about the auditorium to deaden sound. This company having now under way, beside minor work, the large contract for the partitions, firing and column casings of the Rookery, and the double sound proof 2½ inch hollow tile partitions for an Indiana insane hospital, have been obliged to materially enlarge its plant, and now, though one of the latest in the field for fireproof contracting, are doing a rapidly increasing business in the furnishing of porous hollow tile for the protection of all parts of a structure against fire.

COLORADO has become famous for its marvelous gold and silver production, for its picturesque scenery, and its delightful climate. Its mining towns and camps, its massive mountains, with their beautiful green-veined valleys, lofty snow-capped peaks and awe-inspiring cañons, together with its hot and cold mineral springs and baths, and its healthful climate, are attracting, in greater numbers each year, tourists, invalids, pleasure and business seekers from all parts of the world. The journey from Chicago, Peoria or St. Louis and other Chicago, Burlington & Quincy R. R. stations to Denver (the great distributing point for Colorado), if made over the Burlington Route (C. B. & Q. R. R.), will be as pleasant and gratifying as it is possible for a railroad trip to be. At all principal ticket offices will be found on sale, during the tourist season, round-trip tickets, via this popular route, at low rates to Denver, Colorado Springs and Pueblo, Colorado. When ready to start, call on your nearest ticket agent, or address Paul Morton, general passenger and ticket agent C. B. & Q. R. R., Chicago, Ill.

Business Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, Ill., July 1, 1887. }

The volume of business transacted throughout the country during the first half of this year would, if it could be approximated, perhaps exceed the first half of last year by 25 per cent. This estimate is not an excessive one if we content ourselves with the available statistics from railroad, financial, and commercial quarters. Building operations, especially in a score or more of the larger cities are in excess of this. Building material has not advanced, while real estate and labor directly engaged in building have advanced, taking the comparison in any given number of cities. Iron, steel, lumber, nails, builders' hardware, stone, slate, cement, glass, gas fixtures, plumbers' supplies, have each and all gyrated around centers of very little diameters. Practically speaking, building material, taking it all in all, has not advanced within six or eight months. Exceptions can be found, as in the case of bricks in some markets, but when cost is averaged up there is a remarkable uniformity exhibited.

The probabilities are that future fluctuations will be more insignificant. There are those who pretend to believe that the country is approaching an era of higher prices, but when all the surrounding conditions and tendencies and agencies are studied, it is found that the probabilities are on the side of regularity. Whatever latent evil tendencies there are will be corrected by counter tendencies. Whatever of injustice there is in the relations of organized labor to capital will be corrected by stronger agencies than capital can organize, though the cure may not be immediate. The great controlling factors are pointing to enlarging operations. The building trades come in behind the railroad interests. There is assured activity for the next twelve months. Within the past six months programmes have been mapped out by capitalists and inventors which have reference to operations from twelve to eighteen months ahead. High authorities in architecture, building, and in finance have been consulted with reference to the wisdom of expending large sums of money in house building enterprises, and the conclusions arrived at are that house building offers the safest and best opportunities for surplus capital. Railroad opportunities are not so abundant as a few years ago, and the rank and file are afraid of them. Manufacturing is not yielding the comfortable dividends and margins it did years ago, except in certain directions. House building has paid well, besides securing the reward of appreciating values. Hence the growing interest exhibited in house building and in real estate operations. The builders throughout the United States have done well, and see no reason for apprehending an early termination of the activity. Architects have been favored with liberal clients. The industrial condition is sound. Railroad construction activity is general. Earnings are increasing. Locomotive builders have more work in hand than for years. The car builders have been forced to decline large orders and work overtime in some cases to meet their customers' wants. The bridge builders have three to four months' work on hand, and are crowding the structural mills with large orders. Nail makers are desperate over the black outlook for nails, despite the heavy demand sustained by activity in building. The lumber trade has been encouraged during the past six months by a demand which kept supplies at a low level, and prices firmer than a year ago. Agricultural implement makers and wood working machinery manufacturers have closed a good half year and have made ample preparations for another. The legitimate requirements of the country are extraordinary, and there is no occasion for depression. A more conservative management is observable in all trade channels. Enterprise is more intelligent. There is more cool calculation. Commercial failures do not increase in proportion to the increase in the volume of business. Railroad managers are wiping out their most pressing indebtedness, and the manufacturing world is borrowing less money, and paying less interest on what it does owe. These are some of the favorable features of the situation at the opening of the half year, and with wisdom and patience no unfavorable causes will be generated.

Synopsis of Building News.

Abilene, Kan.—Architects Hopkins & Holland, of Topeka, report: Jail and Sheriff's residence, 50 by 75 feet; cost, \$20,000.

Alpeua, Mich.—Architect D. P. Clark, of West Bay City, has made plans for finishing the office of the Churchill House, to cost about \$1,000.

Alto, Ind.—Architect Clint F. Smith, of Kokomo, reports: For school board, brick and stone school house, 25 by 50 feet, slate roof; cost, \$2,500; projected.

Birmingham, Ala.—Architects Sutcliffe, Armstrong & Willett report: Building boom is at hand, but material is scarce, and help the same, and on large jobs money is a little hard to get. We have many plans accepted, but it is hard to get owners to start work. For Painter & Thompson, six-story brick and stone business block, 50 by 100 feet; cost, \$40,000; under way; Leonard, McPoland & Nalls, contractors. For F. H. Whitney, four-story brick business block, 50 by 80 feet; cost, \$20,000; projected; plans made and accepted. For Bessmer Printing Co., four-story business block, 50 by 102 feet; brick and stone; cost, \$25,000; projected; plans made and accepted. For Carolina Real Estate Co., Charleston Block, Bessmer, three and four stories, brick, 300 by 80 feet; cost, \$50,000; under way; McCrossin Bros. & Thomas, contractors. For Third Avenue Hotel Co., six-story hotel, 100 by 140 feet; cost, \$120,000; projected; plans made and accepted. For R. T. Armstrong, six-story brick, stone and terra-cotta building, 40 by 100 feet; cost, \$34,000; projected; plans made and accepted. For Carolina Real Estate Co., twenty two-story frame houses, 30 by 40 feet; cost, \$20,000; under way, day work. For Natchez Land and Improvement Co., ten two-story frame houses, 30 by 40 feet; cost, \$10,000; Westernbrook Bros., builders. For Carolina Real Estate Co., two-story brick row, 30 by 70 feet; cost, \$2,000; under way. Also, two-story brick store and residence, 20 by 70 feet; cost, \$3,000; under way; McCrossin Bros. & Thomas, builders. For E. D. Phillips, one-story frame store and dwelling, 25 by 70 feet; cost, \$2,000; J. E. King, builder. For Carolina Co., two-story frame store and dwelling, 50 by 30 feet; cost, \$1,600; J. E. King, builder. For J. W. Happy, two-story frame residence, 60 by 48 feet; cost, \$3,000; under way; J. S. Memory, builder. For Wm. Berney, three one-story frame dwellings, 40 by 54 feet; cost, \$1,200; each under way; Thos. Packer, builder. For G. C. Ball, two-story frame dwelling, 56 by 20 feet; cost, \$5,000; under way. For Armstrong & Wallace, one-story frame dwelling, 50 by 75 feet; cost, \$2,000; under way. For Jonas Schwab, two-story frame dwelling, 34 by 84 feet; cost, \$3,500; under way. East Lake Baptist Church, one-story frame, 60 by 90 feet; cost, \$7,000; under way. For Ensley City Hotel, two-story frame building, 40 by 118 feet; cost, \$7,000; under way; Knighton & Edwards, builders.

Architects Chisolm & Green report: The present condition would indicate a very large amount of fine buildings for the coming year, and at present it is almost impossible to supply the demand for lumber, brick and other material, so great is the amount of building. For D. F. Constantine and R. J. Terry, three-story and basement brick, stone and terra-cotta building, 52 by 120 feet; cost, \$25,000; under way; Farrar & Crew, builders. For Anniston City Land Co., sixty 3 and 4-room frame cottages, 32 by 36 feet; cost, \$500 each; and fifty, 4, 6 and 8 rooms each, to from \$600 to \$1,200 each; under way. For J. H. Hewlett & Co., three-story brick hotel, 96 by 100 feet; cost, \$24,000; under way; Alex. Memory, builder. South Highlands Episcopal Church, brick and frame, 75 by 90 feet; cost, \$6,500; completing plans. Cahaba Valley Hotel, two-story frame, 75 by 150 feet; cost, \$6,000; completing plans. For Col. Coddle, two-story frame club house; cost, \$4,000; completing plans. For J. C. McKleroy, two-story and basement stone and frame residence; cost, \$10,000; making plans. For J. C. Cobb, three-story brick hotel; cost, \$20,000; projected. For Ledbetter & Co.,

three-story brick bank building; cost, \$50,000; projected. Also, two two-story frame dwellings; cost, \$3,000 each. Besides the above, are a number of less important buildings, costing from \$1,000 to \$3,000.

Boonville, Ind.—Architects Clark & Sauer, of Evansville, report: For C. C. Furguson, brick store building, 28 by 85 feet, tin roof; cost, \$4,000.

Camden, Ark.—Architects Stewart & Carpenter, of El Paso, Texas, report: For H. W. Myar, three-story opera house, 105 by 134 feet, brick and stone, terra-cotta trimmings; cost \$60,000; under way; Chas. Fruin, of El Paso, Texas, builder.

Carmi, Ill.—Architects Clark & Sauer, of Evansville, Ind., report: For school board, brick addition, 42 by 70 feet, to old school building; cost \$6,000; projected. For North Storms, frame dwelling, 38 by 45 feet; cost \$2,500; projected.

Centralia, Ill.—Architect W. H. Milner, of Bloomington, reports: For S. L. Dwight, two-story frame dwelling, 36 by 52 feet; cost \$3,500; under way; W. White, builder. For B. Hausler, one-story frame cottage, 36 by 60 feet; cost \$1,500; projected.

Chattanooga, Tenn.—Architect R. H. Hunt reports: Have prepared work since January 1, 1887, to the amount of \$400,000, including houses of all descriptions, nine-tenths of which have been accepted, and are under way. Present outlook is bright, and expect my figures to run up high before the end of the season. Following is work of my office during last three weeks to June 25: For R. D. Peoples, seven three-story brick stores; cost \$24,000. For Peoples & Caldwell, two two-story brick stores; cost \$9,000. For Chas. D. Mitchell, four three-story frame flats; cost \$12,000. For R. L. Watkins, three two-story brick stores; cost \$10,000. Cottages costing from \$300 to \$1,900; total \$15,000. For M. M. Henderson, frame residence; cost \$3,500. For H. F. Rogers, frame residence; cost \$4,000.

Chicago.—At this writing the entire building interest is waiting to see what kind of a settlement comes through the arbitration committee. Business among architects, contractors and material men has been brisk or slack, according to the amount of out of town business in hand. The strength of the movement against trades unions has been that few firms do an exclusive city business and that out of town has increased largely through receiving special attention. In this particular the outlook in the city will result in good. The only permanent loss is to the journeymen, with whom a day cannot be recovered. It is generally conceded that it has been far better to sustain the immense loss of profit every concern has sustained than to be in a position of continued uncertainty. While nothing definite can be stated, the chances are that the settlement will soon be made, and that a rush of work will in a few weeks obliterate the marks of the greatest suspension of building through strikes that has ever occurred in this country.

Architects Flanders & Zimmerman report: For H. B. Peabody, four-story factory building, 40 by 90 feet, on Canal near Sixteenth street; pressed brick, stone trimmings, galvanized iron cornices, felt roof, skylights, freight elevator, steam heat and power; cost \$25,000; under way; A. Lanquist, mason. For C. E. Peacock, three-story addition, 40 by 55 feet, to brick and stone building, 445-7 State street; galvanized iron cornices, felt roof, skylights, stained glass, closets and bath, passenger elevator, iron channels, beams, etc., electric bells and speaking tubes; cost \$20,000; under way; A. Lanquist, mason; J. H. Blair, carpenter.

Architects Burnham & Root report: For C. W. Needham, two-story residence, 32 by 60 feet, 3647-9 Michigan avenue; pressed brick, brownstone trimmings, copper gutters, slate roof, skylights, stained glass, closets and bath, steam heat, hardwood finish and tiling, electric bells and speaking tubes, mantels, dumb waiters; cost \$15,000; Wm. Soeffker, mason; Edmunds & Hay, carpenters; building under way.

Architects Burling & Whitehouse report: For C. P. Caldwell, three-story residence, 50 by 44 feet, 3252 Wabash avenue; blue Bedford stone front; cost \$14,000; to be commenced at once; Lotz & Stinson, masons; G. A. Johnson, carpenter. For Mrs. Ellen M. Skinner, three two-story dwellings, 50 by 74 feet, 34 to 38 College place; pressed brick, brownstone trimmings; cost \$16,000; Alex. McIntosh, mason. For Father O'Brien, three-story and basement convent school building, 63 by 108 feet, on Belmont avenue, near Halsted street; red pressed brick, Lake Superior variegated brownstone; cost \$45,000; taking figures.

Architect W. G. Barfield reports: For John Morris, six two-story houses, 20 by 65 feet, Vincennes avenue and Thirty-seventh street; St. Louis pressed brick, brown and Michigan sandstone; all modern improvements; cost \$27,000.

Architect H. B. Seelye reports: For A. L. Patterson, three-story stores and flats, 66 by 62 feet, on Cottage Grove avenue, near 37th street, Anderson pressed brick, Bedford stone trimmings, iron channels, beams, etc., felt roof, skylights, closets and baths, freight elevators, wood mantels, electric bells, speaking tubes; cost \$16,000; under way. For Gen. I. J. Wistor, three-story flats, 108 by 65 feet, first story stone, second and third brick, trimmed with copper, copper bays, felt roof, skylights, stained glass, closets and bath, hot air heat, freight elevators, hardwood finish and tiling, electric bells, speaking tubes, "Hess" grates; cost \$34,000; contract not let.

Architect H. H. Boyington reports: For J. W. Cochran, two-story stores and flats, 40 by 78 feet, 39, 33, 35 State street, brick, terra-cotta trimming, closets, bath, skylights; cost \$10,000; under way; J. J. Rogan, mason; Ed. Spiering, carpenter.

Architect W. W. Boyington reports: For United States Express Company, two-story addition to building, 40 by 180 feet, 85 Washington street, brick and terra-cotta, iron channels, beams, etc., skylights, fireproofing, closets, passenger and freight elevators, steam heat and power, hardwood finish and tiling, wood mantels, electric light; cost \$70,000; under way; Robinson & Minor, masons; Thomas Clark & Son, carpenters.

Architect S. M. Randolph reports: For W. G. Gordon & Co., twenty two-story dwellings, on Turner and Spaulding avenues, north of Ogden avenue, Anderson brick, Lemont stone, felt roofs, hot air heat, skylights, closets and baths, electric bells, speaking tubes, etc., mantels; cost \$70,000; contracts not let.

Architect L. G. Hallberg reports: For S. E. Gross & Co., three two-story frame cottages, 25 by 42 feet, at Calumet Heights; cost \$7,500; under way; Dan Duggan, mason; J. Depatie, carpenter.

Cincinnati, O.—Reported by Mr. Lawrence Mendenhall:

The labor difficulties have been amicably adjusted, the tinner and cornice makers having at last given in, thus scoring another victory for the bosses. The contractors and architects feel assured of a very fair fall business. In building circles it seems to be the feeling that the disastrous Fidelity bank failure will stimulate real estate purchases, which will cause building to take, as it were, a jump. May the predictions come true, "and long may she wave." The corner stone of our new Chamber of Commerce was laid June 11th, with very simple ceremonies, and day by day very substantial progress is being made.

Architect Charles Crapsey reports: Frame dwelling for W. J. Fitzgerald, to be erected on Kinney avenue, north Walnut Hills, to cost \$3,500; not let. Frame dwelling for M. D. Burke, Kennedy Heights, to cost \$4,500; let. Frame dwelling for Dr. Thad. A. Reamy, to be erected on Oak street; not let. Four stores and flats, 100 by 75 feet, for John Breen, to be located at Tusculum and Eastern avenues; brick; three stories; not let. In conjunction with Architect W. R. Brown, schoolhouse at Loveland, O., to cost \$12,000; and remodeling court house at Winchester, Ky., also building vaults for same. Three fancy frame cottages for Gen'l Shattue's subdivision at Madisonville, O., to cost \$3,000 each; not let. Frame dwelling for Rev. Earl Cranston, to be erected in Avondale, to cost \$6,000; not let. Block of stores and flats for Parrish & Morey, at Hamilton, O. Stone and tile dwelling for Rev. W. E. Stevens, to cost \$6,000, and to be erected at Tusculum; not let. Frame dwelling for U. Engleman, Miamisburg, O., to cost \$6,000; not let; also pressed brick dwelling in same town for Dr. T. B. Lyons; cost \$7,000; let. In conjunction with W. R. Brown, Baptist Church, at Franklin, O., to cost \$15,000; not let. Two frame dwellings on Melrose avenue, Walnut Hills, for Geo. Ebersole and H. K. Robb, to cost \$7,500; let. Frame dwelling for David Herr, Hartwell, O.; cost \$4,500; let.

The plans submitted by Architect H. E. Siler, for the main building of our Exposition, and those of Architect J. W. McLaughlin, for the canal building for the same project, in the eyes of the Building Committee and the Commissioners more fully meet the requirements than any of the others, and will probably be adopted.

Plans have been prepared by Architects Buddemeyer, Plympton & Trowbridge for a school building three stories high, containing eighteen class-rooms—twelve 27 by 32 feet, and six 27 by 37 feet. The building will be 114 feet on Canal and 128 on Elm street. It will be constructed of stock brick, with freestone trimmings, as in the new schoolhouse on Chase street, Cumminsville. The basement will be nine feet high, and contain ample room for play-rooms, etc., and will be well ventilated and lighted. The roof will be tiled in the latest style of the art. The style of architecture will be the early free Italian Renaissance, a departure from the present plain and pointless character of school buildings in Cincinnati, and when completed, it will be an ornament to that part of the city. It is estimated to cost about \$50,000. The design has been individually examined by the Committee on Buildings of the Board of Education, and indorsed by each one of them. They also report: Brick and shingle dwelling for John Gates, twelve rooms,

thoroughly Queen Anne style, half finished in quartered oak, balance of interior to be finished in white pine; cost \$12,500, and will be located at Oak and Home streets, Walnut Hills; contract not let. Two-story stock brick dwelling, with plastered gables, for Chas. Whiteley, to be erected on Chase avenue, Cumminsville; to cost \$4,500; contract not let. Remodeling E. E. Wood's dwelling on Main avenue, Avondale, adding five rooms, etc.; cost \$4,000; contract not let; brick and frame stable, 22 by 30 feet, for Chas. Domhoff, Hamilton Pike, Twenty-fifth Ward. Making plans for S. W. Smith, for an iron and stone store building, to be erected on south side of Sixth street, between Race and Elm streets, and six-story brick printing warehouse for Cohen & Co., to cost \$19,000, and to be located on Longworth between Race and Elm streets.

Architect S. E. Des Jardins reports: Stone dwelling, containing fifteen rooms, massive stonework, hardwood finish, for Hon. Chas. W. Baker, to be erected on Reading Road, near Oak street. Ten-room fancy frame dwelling, for Alfred White, to be erected in Avondale; cost \$8,000. Frame dwelling for W. S. Green, Middleport, O.; cost \$4,500. Remodeling J. S. Blymyer's dwelling at Mansfield, O.; remodeling frame dwelling at Madisonville, O., for W. C. Rodgers; remodeling brick dwelling for Mrs. May Williams, East Walnut Hills; building addition to W. Rawson's dwelling at Westwood, O.; physicians office for Dr. Johnstone, Danville, Ky., to cost \$5,000, and making sketch for a colored Baptist church, to be erected at Richmond and Mound streets, to cost \$15,000. He is also superintending the erection of W. W. Watt's fine dwelling at Richmond, Ky.

Architect W. R. Brown reports: Seven-story stock brick factory for S. W. Frost, 32 by 75 feet, to cost \$15,000, in conjunction with Architect Chas. Crapsey; schoolhouse at Loveland, O., to cost \$12,000; Baptist church at Franklin, O., brick with freestone trimmings; cost \$12,000. Dwelling for Dr. T. B. Lyons, Miamisburg, O.; remodeling court house, at Winchester, Ky.; cost \$15,000. Block of stores and flats for Parrish & Morey, Hamilton, O., and dwelling at Miamisburg, O.; cost \$8,000. He has other work in hand.

Architect Gustave W. Drach is engaged on plans for a county infirmary, to be erected at Rising Sun, Ind. Has about completed the erection of a handsome frame dwelling for John Auell, in Clifton; also a dwelling for A. Nulsen in same suburb. He is making sketches for a number of buildings.

Architect J. B. Steinkamp reports: Thos. Emery Son's four-story flat, freestone front, to be erected at 340 West Fifth street, to cost \$18,000. Herman Tapke, two and a-half story dwelling, to cost \$9,000; contract let. Four-story flat for G. Kuhlman, 61 Woodward street; contract let. Also four-story store and flat on Court street, for Thos. Emery's Sons.

Architect Emil G. Reuckert reports: Four-story brick flat and store for Louis Langhorn, to be erected at the corner of Liberty and Dudley streets, to cost \$12,000. Two and a half story frame dwelling for Chas. Eschenbach, on Eastern avenue, to cost \$3,500. Two and a half story brick dwelling for Geo. W. Schneider, on Borden street, Cummins-ville, to cost \$3,000. Two two and a half story brick dwellings for Weber & Geis, on Euclid avenue, Corryville, to cost \$3,500 each. Two and a half story brick dwelling for J. H. Gentrup, to be located on Ludlow avenue, Clifton, to cost \$9,000; also brick stable for same, extra from above price, and two and a half story brick dwelling for Wm. C. Kennett, on Dayton street, near Linn, to cost \$6,500.

Architect H. E. Siter has removed his office from Lincoln's Inn Court building, to the United States building, S. E. corner Third and Walnut streets. This was his first building here, and all the offices are well lighted and arranged. Mr. Siter reports: Third National Bank, stone front, 40 by 100 feet, offices above; skylight 22 by 58 feet; building lighted from center and both ends; cost, when complete, with vaults, about \$70,000. Warehouse on Broadway, brick and stone, to cost \$8,000. Making improvements at 134 and 136 W. Seventh street, for Abe Furst and Longworth estate, remodeling old buildings into stores and flats. Stone and frame dwelling for Chas. Fleischman, to be erected on Walnut Hills; cost, \$20,000; also, stable for same, to cost \$5,000. He is busy on other work.

Architect W. W. Franklin, Glenn building, S. W. corner Race and Fifth streets, reports: Two and a half story pressed brick dwellings for H. H. Tatem, hardwood finish, first story; to be erected in Hartwell, Ohio, to cost \$10,000. Remodeling Episcopal Church, Hartwell, to cost \$3,500. Remodeling Charles Stewart's dwelling in Clifton, to cost \$3,000. Making sketches for a two and a half story pressed brick dwelling, hardwood finish, for Abe Steinau.

Architects G. & A. Brink, 339 Wade street, are engaged on plans for a tenement house, to be built on Cutter street, near Wade, for Mr. Henry Hoberg; cost, \$6,000. Dwelling house for Mr. Henry Mueller, Ninth street, between Baymiller and Freeman avenue; cost, \$7,000.

Architect Jas. W. McLaughlin, Johnston building, is engaged on plans for the First National Bank building, which is to occupy the site of their old quarters, corner of Walnut and Third streets. This building will be six stories high, with basement. The first story will be red Missouri granite, above that pressed brick with brownstone trimmings. The first floor will be used by the bank, the other stories above for offices, while the basement will be used for brokers and insurance companies. Very little wood will be used in the building, and will be as near fireproof as possible to build it. The walls are very massive, with foundation of Indiana flat rock. The cost of this building will be over \$100,000.

Coldwater, Mich.—Architect M. H. Parker reports: No strikes here, all mechanics busy, wages about the same as last year. Have plans under way for two-story brick school building, 56 by 80 feet; cost \$8,000. Accepted design for branch county court house, 104 by 87 feet, two-story brick, with stone trimmings, metallic shingle and slate roof, fireproof vaults; cost \$40,000.

Coleridge, Neb.—Architects Martin & Batwell, of Sioux City, Iowa, report: For E. E. Shumley, residence; cost not estimated.

Decatur, Ill.—Architect W. H. Milner, of Bloomington, reports: For P. Loeb, one-story and basement stone and frame cottage, 57 by 85 feet, all modern improvements; cost \$15,000; projected.

De Kalb, Ill.—Architect Geo. F. Barber reports: Present condition moderate; outlook good. Have under way and projected, three frame residences, to cost \$2,000, \$1,800, and \$2,000; Barber & Boardman, builders.

Detroit, Mich.—Present condition and outlook very good.

Architect Blackwell reports: For Herman Eckner, two-story store and dwelling, 26 by 72 feet, brick, stone trimmings; cost \$6,000; August Dorsch, builder.

Architect W. G. Malcomson reports: For Fred Chambe, addition to three-story brick, 60 by 20 feet; cost, \$7,000; P. D. Talon, carpenter; Joe Dietz, mason. For Davenport estate, block of two-story stores, 60 by 100 feet, brick, stone trimmings; cost \$28,000; under way; Tapping & Fisher, masons; Henry George & Son, carpenters.

Architects Donaldson & Meier report: For Jacob Mann, three-story factory building, 30 by 44 feet, brick; cost \$7,000; M. Blay & Sons, builders. For H. C. Wisner, three-story brick and stone building, 40 by 53 feet, slate roof; cost \$8,200; W. H. Tranes, builder.

Architect W. E. Brown reports: For Brush Estate, block of two three-story stores, 40 by 80 feet, brick, stone trimmings; cost \$12,000; Daniel Lane, mason; Henry George & Son, carpenters.

Architects Mason & Rice report: For Tower Bros, five-story creamery and factory building, 60 by 100 feet; cost \$20,000; day work. For A. G. Boynton, three-story dwelling, 26 by 72 feet, brick, stone trimmings, slate roof; cost \$6,500.

Architects Hess & Raseman report: For C. H. Bulil, one-story addition to office building; cost \$11,000; Dean Bros., masons, Spitzley Bros., carpenters.

Architect G. W. Lloyd reports: For C. A. Kent, one-story addition to brick store; cost \$5,000; A. Chapaton, mason; R. Hillson, carpenter.

Architects Spier & Rohns report: For Fred. Mueller, two-story store and dwelling, 24 by 44 feet, brick, stone trimmings; cost \$3,000; Swartz & Son builders.

Architects Scott & Co. report: For Oren Scotten, two-story frame dwelling, 26 by 48 feet, slate roof; cost \$5,000; Jaynes & Son, builders.

Architect Peter Diedrich, Jr., reports: For J. V. Lisse, two-story frame dwelling, 30 by 50 feet; cost \$3,000; Diedrich Bros., builders. For J. C. Posschins, three-story double store, 50 by 100 feet, brick; cost \$8,000; M. Blay & Son, builders.

M. Scholl is building a two-story brick double dwelling, 40 by 56 feet, for Jacob Darinstarten, to cost \$5,000.

Cope Bros. are to build a three-story factory, 60 by 68 feet; cost \$5,000; not let.

Building permits were issued during the month of June for new buildings, to cost \$297,045; for alterations, etc., to cost \$105,270; total, \$402,315.

Duluth, Minn.—Architect J. J. Egan, of Chicago, Ill., reports: For Spaulding Hotel Company, seven-story hotel building, 150 by 115 feet, pressed brick, brownstone trimmings, galvanized iron cornices, felt roof, skylights, fireproofing, stained glass, closets and baths, passenger and freight elevators, steam heat and power, iron channels, beams, etc., hardwood finish and tiling, electric bells, speaking tubes, wood or marble mantels; cost \$350,000; under way; Hennessy, Agnew & Cox, of St. Paul, contractors.

Evansville, Ind.—Architects Clark & Sauer report: Business good up to present, but prospects not very flattering. For Wm. Heilman, three-story brick store building, 60 by 100 feet, tin roof; cost \$13,000; under way; Chas. P. Stoltz, builder. For Clint Stacer, brick carriage house and stable, 26 by 40 feet, slate roof; cost \$3,000; under way; P. Q. Elliott, builder. For Wm. A. Heilman, three-story brick store building, 20 by 70 feet, tin roof; cost \$3,500; under way; Adam Weikel and Chas. P. Stoltz, builders.

Fayette, Ia.—Architect F. D. Hyde, of Dubuque, reports: For Upper Iowa University, three-story brick and frame dining hall, 36 by 60 feet; cost \$7,000; under way.

Gibson City, Ill.—Architect W. H. Milner, of Bloomington, reports: For John Burt, three-story and basement hotel, 70 by 90 feet; cost \$20,000; projected.

Greenville, Pa.—Architects Kannengeiser & Kling, of Youngstown, Ohio, report: For N. E. Tillotson, two-story frame, 36 by 46 feet, slate roof; cost \$5,000; plans under way.

Hamilton, Ont.—Architect James Balfour reports: Trade good, with good prospects. All the architects and builders are busy. For William Southam, brick and stone dwelling; cost \$7,000; under way; James Hossack, builder. For Samuel Baker, alterations to dwelling; cost \$6,000; under way; James Hossack, builder. For Shedden Company, brick and stone warehouse; cost \$4,000; under way; W. I. McDonald, builder. For James G. Davis, two-story brick and stone dwelling; cost \$7,000; under way; W. I. McDonald, builder. For W. I. Kingdon, two brick and stone dwellings; cost \$5,000; James Mercer, builder. For Adam Clark, brick and stone dwelling; cost \$4,500; Howard Bros., builders. For Y. M. C. A., brick and stone building; cost \$20,000; ready for figures; also several less important dwellings, ranging from \$2,000 to \$3,000.

Hancock, Mich.—Architect J. B. Sweatt, of Marquette, reports: For Edward Ryan, two-story brick addition, 56 by 100 feet, tin roof; cost \$3,000. Also two-story brick building, 82 by 96 feet, tin roof; cost \$12,000; J. B. Sweatt, builder.

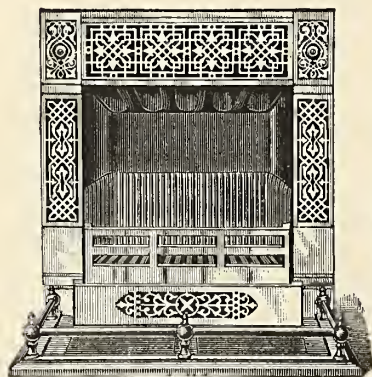
Hawthorne, Ill.—Architects Glark & Sauer, of Evansville, Ind., report: For the school board, frame school building, 30 by 56 feet; cost \$2,000; projected.

Iowa Falls, Ia.—Architect F. D. Hyde, of Dubuque, reports: Addition 40 by 60 feet to stone Congregational Church building; cost \$40,000; under way.

Knoxville, Tenn.—Architects Beaver & Hoffmeister report: Outlook for building not so encouraging as we would wish; buildings mostly small. For Thos. H. Hicks, two double brick tenements, 34 by 58 feet; cost \$7,000; under way; R. Jones, builder. For A. David, two-story brick residence, 58 by 42 feet, slate roof; cost \$6,000; projected. For M. L. Patterson, three-story brick store; projected. For J. B. Minnis, two-story brick store; projected. Also several less important buildings, ranging from \$1,800 to \$3,500.

[Continue on page XIV.]

The Jackson Heat-Saving and Ventilating-Grate.



FRONT VIEW.

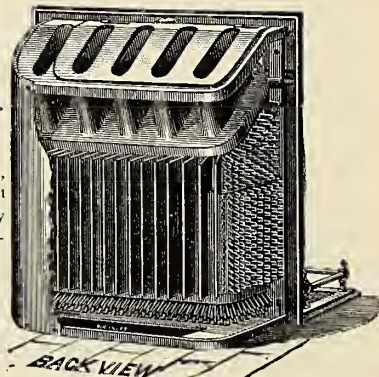
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SEND FOR CIRCULAR.

[Continued from page 100.]

Kokomo, Ind.—Present outlook fair. A large number of small dwellings are to be built soon, also two large factories will be commenced at once. Architect Clint. F. Smith reports: For city of Kokomo, school building, 70 by 78 feet, brick, stone and terra-cotta, slate roof; cost \$10,000; projected. For John Leach, frame dwelling, slate roof; cost \$2,500. For Will Hazeltine, frame dwelling, slate roof; cost \$2,000.

The following are from plans of Architect James F. Alexander, of Lafayette: For S. Davis & Son, three-story brick, stone and terra-cotta business block, 22 by 80 feet; cost \$7,000; under way; G. W. McGowan, builder. For Bell & Purdam, three-story brick, stone and terra-cotta business block, 22 by 100 feet; cost \$7,000; under way; Louis Goodwine, builder. For Dixon & Co., three-story brick, stone and terra-cotta business block, 44 by 100 feet; cost \$12,000; under way; John Sipe, builder. For Henry Styer, three-story brick, stone and terra-cotta business block, 22 by 80 feet; cost \$5,000; under way; Thomas Mason, builder.

Joseph Boyer is building a brick and stone factory building, to cost \$10,000, for the Kokomo Straw Board Works. N. McAllister is building three frame buildings, to cost \$10,000, for the Kokomo Glass Works.

Lake Linden, Mich.—Architect J. B. Sweatt, of Marquette, reports: For Neuman & Frelease, two-story brick building, 50 by 100 feet; cost \$12,000; projected; contracts are not let.

Lemars, Iowa.—Architects Martin & Batwell, of Sioux City, report: For Union Hotel Co., three-story and basement brick hotel building; cost \$40,000.

Little Rock, Ark.—Architect F. J. Rickon reports: For Little Rock Electric Light Co., new building, 60 by 70 feet, at foot of Cumberland street; estimated cost \$6,000.

The Opera House is to be entirely remodeled, under the management of Mr. Thomas.

Lyons, Kan.—Architect L. M. Wood, of Topeka, reports: For Lasley, Godshalk & Co., block of stores; cost \$35,000. For D. M. Bell, store; cost \$8,000. For Electric Light Co., block of stores; cost \$18,000. For G. A. R. Hall, building; cost \$12,000. Masonic Temple; cost \$28,000. Contracts on above buildings are not let.

Manhattan, Kan.—Architects Hopkins & Holland, of Topeka, report: For L. R. Elliott, residence, to cost \$7,000; projected.

Mankato, Kan.—Architects Hadley & Cooper, of Topeka, report: For J. P. Fair, two-story frame dwelling, 29 by 50 feet; cost \$3,500; under way.

Mapleton, Ia.—Architects Martin & Batwell, of Sioux City, report: For Dr. F. Griffin, brick block and Masonic hall; cost not estimated.

Marquette, Mich.—J. B. Sweatt reports: Present outlook for building in the upper peninsula of Michigan is encouraging. For G. W. Hager, three-story frame residence, 38 by 50 feet; cost \$10,000; under way; J. B. Sweatt, builder. For J. M. Case, three-story frame residence, 40 by 60 feet; cost \$13,000; under way; J. B. Sweatt, builder. For Thos. Jory, two-story frame dwelling, 27 by 36 feet; cost \$2,000; under way; J. B. Sweatt, builder. For Mrs. E. Bremtin, three-story building, 60 by 90 feet; cost \$30,000; under way; J. B. Sweatt, builder. For P. Werner, two-story frame, 24 by 40 feet; cost \$4,000; under way; P. F. Kelly, builder. "Clifton House," three-story brick, 47 by 120 feet, tin roof; cost \$20,000; under way; J. B. Sweatt, builder.

Mason, Mich.—Architect D. P. Clark, of West Bay City, reports: For S. J. P. Smead, two-story frame residence, 35 by 65 feet; cost \$6,000.

Millbank, Dak.—Architects Martin & Batwell, of Sioux City, Iowa, report: County jail building; cost \$10,000; Diebold Safe and Lock Company, contractors.

Morristown, Tenn.—Architects Beaver & Hoffmeister, of Knoxville, report: For J. C. Mathews, two-story brick store, 50 by 150 feet; cost \$7,000; projected.

Mount Vernon, Ind.—Architects Clark & Sauer, of Evansville, report: For A. Wassern, frame dwelling, 36 by 52 feet, slate roof; cost \$2,000; under way.

Negawee, Mich.—Architect J. B. Sweatt, of Marquette, reports: Three-story brick high school building, 136 by 85 feet, metallic roof; cost \$35,000; contract let July 8.

New Castle, Ind.—S. H. Elliott, contractor and builder, reports: Present condition, good; outlook, reasonably good. Have one gas well, and boring for more. For J. W. Maxim, two-story frame dwelling, 42 by 51 feet; also stable, 26 by 34 feet; cost \$7,300; nearly completed; S. H. Elliott, builder. For F. R. Vaughan, two-story frame dwelling, 32 by 60 feet; cost \$4,500; S. H. Elliott, builder. For Benj. Allen, two-story brick residence, 44 by 49 feet; cost \$6,000; S. H. Elliott, builder.

New Corporations.—The St. Joseph Pressed Brick Company, of St. Joseph, Mo., has been incorporated; capital stock, \$10,000; Carroll Connitt, Chas. B. Chase, Geo. C. Hull, G. W. Morris and others, incorporators. The Forest City Dry Pressed Brick Company, of Wichita, Kan., has been incorporated. Capital stock, \$100,000. Wm. Mathewson, O. Martinson, Amos Aspey, Robert M. Piatt and others, incorporators. The Wetmore & Morse Granite Company, Chicago; capital stock, \$150,000; incorporators, W. H. Wetmore, W. W. Stewart, F. C. Wetmore. The American Terra Cotta and Ceramic Company, of Chicago, has been incorporated; capital stock, \$100,000; Chauncey H. Miller, Charles E. Piper and Matt Thome, incorporators. The Chicago Automatic Boiler Company, of Chicago, has been incorporated; capital stock, \$15,000; G. A. Colby, William S. Armour and M. C. Armour, 185 Dearborn street, incorporators. The Graydon Safety Car Heating Company, of Indianapolis, has been incorporated; capital stock, \$100,000; William M. and Andrew Graydon and Charles Austin, incorporators. The Kellogg Oil, Paint and Varnish Company, of Buffalo, N. Y., has been incorporated; capital stock, \$50,000; Spencer Kellogg, Sidney McDougall and Wm. H. Van Vliet, Jr., incorporators. The Dunlap Manufacturing Company, of Chicago, has been incorporated; capital stock, \$15,000; John S. Dunlap, J. P. Black and C. L. Bonney, 175 Dearborn street, incorporators. The Hope Ventilator Company of Kansas City, Mo., has been incorporated; capital stock, \$10,000; John A. Duncan, William Masters, John T. Hope and Luke J. Hope, incorporators. The Chicago Brass Hardware Company, of Chicago, has been incorporated; capital stock, \$5,000; Frank S. Terry, Don C. Peck and Robert P. Bates, 95 Washington street, incorporators. The O'Brien Patent Safety Scaffold Company, of Philadelphia, has been incorporated; capital stock, \$100,000; John E. Stevenson, 3508 Barrington street, incorporator. The Shackleton Car Heating and Ventilating Company, of New York, has been incorporated; capital stock, \$100,000; Geo. W. Dithridge, Robert M. Cushman, 60 Liberty street, and Charles M. Reynolds, incorporators. The Western Brass Manufacturing Company, of Cincinnati, has been incorporated; capital stock, \$5,000; James Stout, W. A. Lyons, Richard R. Daly and others, incorporators. The Zarley Stone Company, of Joliet, Ill., has been incorporated; capital stock, \$4,000; James O. Zarley, Edward Baker and John H. Lawler, incorporators. The Empire State Heating and Power Company, of New York, has been incorporated; capital stock, \$100,000; John R. McNulty, Martin B. Brown, David Rutsky, 60 Broadway, Jacob F. D. Solis and others, incorporators. The Gilson Asphaltum Company, of St. Louis, Mo., has been incorporated; capital stock, \$25,000; Chas. O. Baxter, 115 Pine street; Henry E. Naffiz and Chas. Ottmann, incorporators.

Newmarket, Tenn.—Architects Beaver & Hoffmeister, of Knoxville, report: For Geo. Long, two-story and attic country hotel, 65 by 42 feet; cost not estimated; under way; day work.

Normal, Ill.—Architect W. H. Milner, of Bloomington, reports: For J. E. Baker, one-story frame dwelling, 35 by 50 feet; cost \$3,000; Thos. Garrett, builder.

North Manchester, Ind.—Walter Laidlow, Jr., slate roofer, reports the following work under way and projected: Lawrence Mills & Co., three-story bank and office building, 21 by 100 feet, brick and stone, terra-cotta trimmings, tin and slate roof; cost \$8,000; projected; contract not let. L. J. Nofztger & Son, two-story brick store building, 24 by 156 feet, galvanized iron cornice, tin and slate roof; cost \$5,000; M. Baker, mason; J. D. Spurgeon, carpenter. A. E. Stewart, two-story brick dwelling, slate roof; cost \$3,500; roof on; J. D. Spurgeon, carpenter. Dr. M. O. Lower, two-story brick dwelling, stone trimmings, slate roof; cost \$4,000; under way.

Mr. Laidlow says "there will be considerable building here this season; several small dwellings and a number of stores, besides those under way, are talked of."

Oak Park, Ill.—Architects Patton & Fisher, Chicago, report: For Jas. W. Scoville, extension of water works consisting of a two-story office building, 31 by 35 feet, and a one-story machine shop, 25 by 136 feet, estimated cost \$8,000; work commenced.

Oconto, Wis.—Architects Martin & Batwell, of Sioux City, Iowa, report: For Oconto county, jail building, to cost \$14,000; Diebold, Safe & Lock Co., contractors.

Ogden, Utah.—Architects Patton & Fisher, of Chicago, Illinois, are preparing plans for the New West Education Commission for a school house, 70 by 76 feet, estimated cost \$12,000.

Omaha, Neb.—Architects McDonald & Ogilvy report: We have a great many small houses in prospect, also some larger tenements. For A. H. Fitch, three-story brick and iron stores and flats, 50 by 100 feet; cost \$15,000; under way; Chas. W. Partridge, builder. For Ira Van Camp, three two-story and basement brick and frame dwellings, 66 by 36 feet; cost \$12,000; projected. For Miss Helen Jones, double two-story frame tenement, 40 by 40 feet; cost \$4,000; under way; Chas. W. Partridge, builder. For W. C. Burnam, two-story frame dwelling, 24 by 40 feet; cost \$2,000; under way; Thos. Cunningham, builder. For R. W. Gibson, two-story frame residence, 30 by 46 feet; cost \$4,000; under way; also several smaller dwellings ranging from \$1,500 to \$3,000; projected and under way.

Peoria, Ill.—Architect W. H. Milner, of Bloomington, reports: For W. G. Baldwin, two-story frame residence, 42 by 58 feet; cost, \$8,000. W. H. Coleman, builder.

Salina, Kan.—Architect L. M. Wood, of Topeka, reports: For Wm. Berg, residence; cost, \$6,500.

Salt Lake City, Utah.—Architect R. Kletting reports: For L. C. Karrick, two-story brick store, 27 by 50 feet; cost, \$3,000; plans under way.

Sheffield, Ala.—Architect Wm. S. Hull reports: Present condition of building very good. There is about \$350,000 in residences and stores under construction and contract, and about \$1,300,000 in industrial plants under construction. For Mobile Real Estate Co., three-story brick building, 50 by 80 feet, tin roof, cost \$9,000. J. E. Warner, builder. For B. Wolf & Bro., two-story brick, 25 by 80 feet, tin roof; cost, \$3,600; under way; J. H. Moslage & Co., builders. For J. Woog, three-story and basement stone front building, 50 by 120 feet; cost, \$18,000. Basement in.

Sibley, Ia.—Architects Martin & Batwell, of Sioux City, report: For Pioneer Agricultural Society, amphitheater, stands, pavilions, etc; cost not estimated.

Sioux City, Iowa.—Architects Martin & Batwell report: For Abel Anderson, three-story custome and pressed brick building; cost not estimated. For F. F. Beck, frame dwelling, to cost \$8,000.

Standish, Mich.—Architect D. P. Clark, of West Bay City, reports: One-story frame school house, 62 by 96 feet; cost, \$4,500; contract let about June 20.

Streator, Ill.—Architect W. H. Milner, of Bloomington, reports: For Wm. Graeser, two one-story cottages, 25 by 40; cost \$1,000 each; projected.

Stillwater, Minn.—Architects Burling & Whitehouse, of Chicago, Ill., report: For Hon. D. M. Salim, Union Depot, building brick and variegated brown stone; cost, \$25,000.

Swansee City, Fla.—Architects Beaver & Hoffmeister, of Knoxville, Tenn., report: For Otis A. Miller, three-story frame hotel; cost \$20,000; under way; day work.

Topeka, Kan.—Architects Hadley & Cooper report: Outlook good, plenty of work. For State Normal School, three-story and basement brick and stone building, 80 by 85 feet, slate and tin roof; cost \$26,000; foundation commenced; John Hammond, contractor. For Masonic Society, three-story and basement brick and stone building, 50 by 100 feet, tin roof; cost \$20,000; contract not let. For M. Snottinger, two-story frame dwelling, 30 by 50 feet; cost \$3,500; under way; F. L. Stevenson, builder. Also preparing plans for a \$2,000 frame dwelling for Geo. F. Parmelee, of St. Louis.

Architects Hopkins & Holland report: For H. P. Throop, four-story and basement hotel building, 100 by 150 feet; cost \$75,000; to be known as "Hotel Throop"; building under way. Odd Fellows' Hall, to cost \$25,000; under way. For A. L. Allen, residence, to cost \$5,000; under way. For H. K. Rowley, residence, to cost \$10,000; under way.

Architect L. M. Wood reports: Outlook very good. State Fair buildings, to cost \$100,000. For Samuel Hopkins, residence; cost \$7,000.

Toronto, Ont.—As a final settlement of the recent labor troubles, which have stopped a large amount of building, much of it for this year, the master masons and bricklayers have signed an agreement, to be in force for three years. In other trades, the carpenters, plasterers and lathers are still out.

West Bay City, Mich.—Architect D. P. Clark reports: For J. F. Norton, two-story brick veneered store building, 50 by 60 feet; cost \$4,500; nearly completed. For P. R. T. Krusch, two-story brick store, 25 by 75 feet; cost \$3,500. For Bay City Opera House Co., two-story and basement Public Library building, 41 by 70 feet; cost \$7,000. Also a number of smaller buildings, ranging from \$1,000 to \$2,500 in cost.

West Branch, Mich.—Architect D. P. Clark, of West Bay City, reports: One-story brick and frame schoolhouse, 100 by 60 feet; cost \$5,000.

Williamsville, Kan.—Architect W. H. Milner, of Bloomington, Ill., reports: For Christian Church Society, frame church, 40 by 70 feet; cost \$2,000; John W. Evans & Son, of Bloomington, builders.

Winfield, Kan.—Architect L. M. Wood, of Topeka, reports: For F. P. Baker, residence; cost \$5,000; contract not let.

Woodstock, Ont.—Architects Cuthbertson & Fowler report: Outlook, fair. For Congregational Society, stone church, 59 by 98 feet; cost \$15,000; under way; Beckerton & Co., builders. For J. F. O'Neil, extension to O'Neil Opera House, 40 by 60 feet, brick; cost \$10,000; under way; Beckerton & Co., builders. For W. L. McKay, two-story frame dwelling, 26 by 30 feet; cost \$3,500; under way; Large & Bowen, builders. Two-story brick public school building, 35 by 70 feet; cost \$4,000; under way; Beckerton & Co., builders. For James Scott, three-story brick dwelling, 35 by 55 feet; cost \$7,500; under way; Geo. Clarkson, builder. For W. H. Millman, two three-story brick dwellings, 34 by 58 feet; cost \$10,000; projected. Also several less important buildings.

Youngstown, O.—Architects Kannengeiser & Kling report: Church of Immaculate Conception, brick and stone building, 60 by 140 feet, slate roof; cost \$25,000; plans under way.

PROPOSALS.

BOARD OF TRADE.

Sealed proposals will be received at this office until 12 o'clock noon, July 15, 1887, for the construction of the Board of Trade building at Columbus, Ohio.

Copies of the specifications and drawings can be seen at the office of Elah Terrell & Co., architects, Columbus, O.

Bids for any part of the building must be accompanied by a certified check of \$500, and for the whole building \$5,000. Bids will be received for separate parts or for the building complete. The directors reserve the right to reject any or all bids.

For the directors.

CHARLES G. LORD, Secretary.

CITY HALL.

Sealed proposals will be received by the undersigned committee on city hall, for the construction of a City Hall building, on the corner of Third and Hampshire streets, in the city of Quincy, Illinois, as per plans and specifications made by the architect, Harvey Chatten, which will be seen on file in the city office.

Bids will be received up to July 15, 1887, and such bids opened by said committee at 2 o'clock p.m. of said day.

Each proposal must be accompanied by a good and sufficient bond of five thousand dollars, payable to the city of Quincy, Illinois. The committee reserves the right to reject any and all bids.

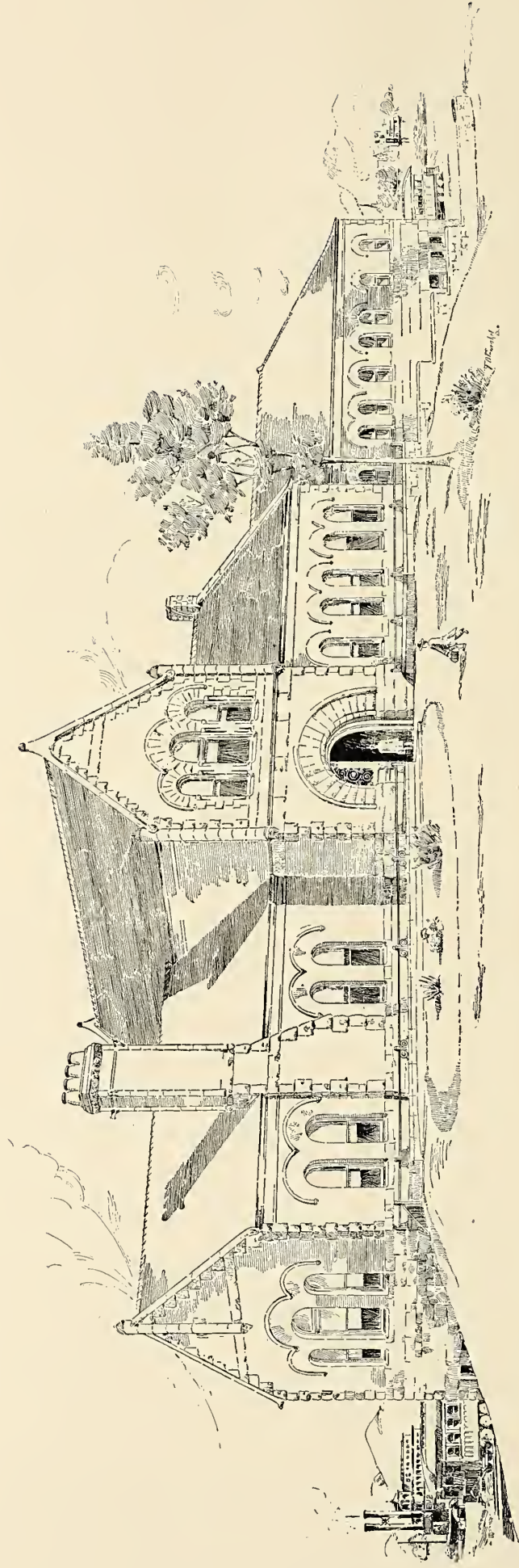
H. SWIMMER,
E. H. OSBORN,
JOHN H. FISHER, } Committee on
City Hall.

CITY HALL.

Sealed proposals will be received by the undersigned until 11 o'clock a.m., July 30, 1887, for the construction of the superstructure of the City Hall building, in accordance with the plans and specifications on file in the office of the board of public works.

Bids to be made upon printed blanks furnished by the board, and to be accompanied by a certified check in the sum of one thousand dollars, as an evidence of good faith. The board reserves the right to reject any or all bids, and to waive all defects.

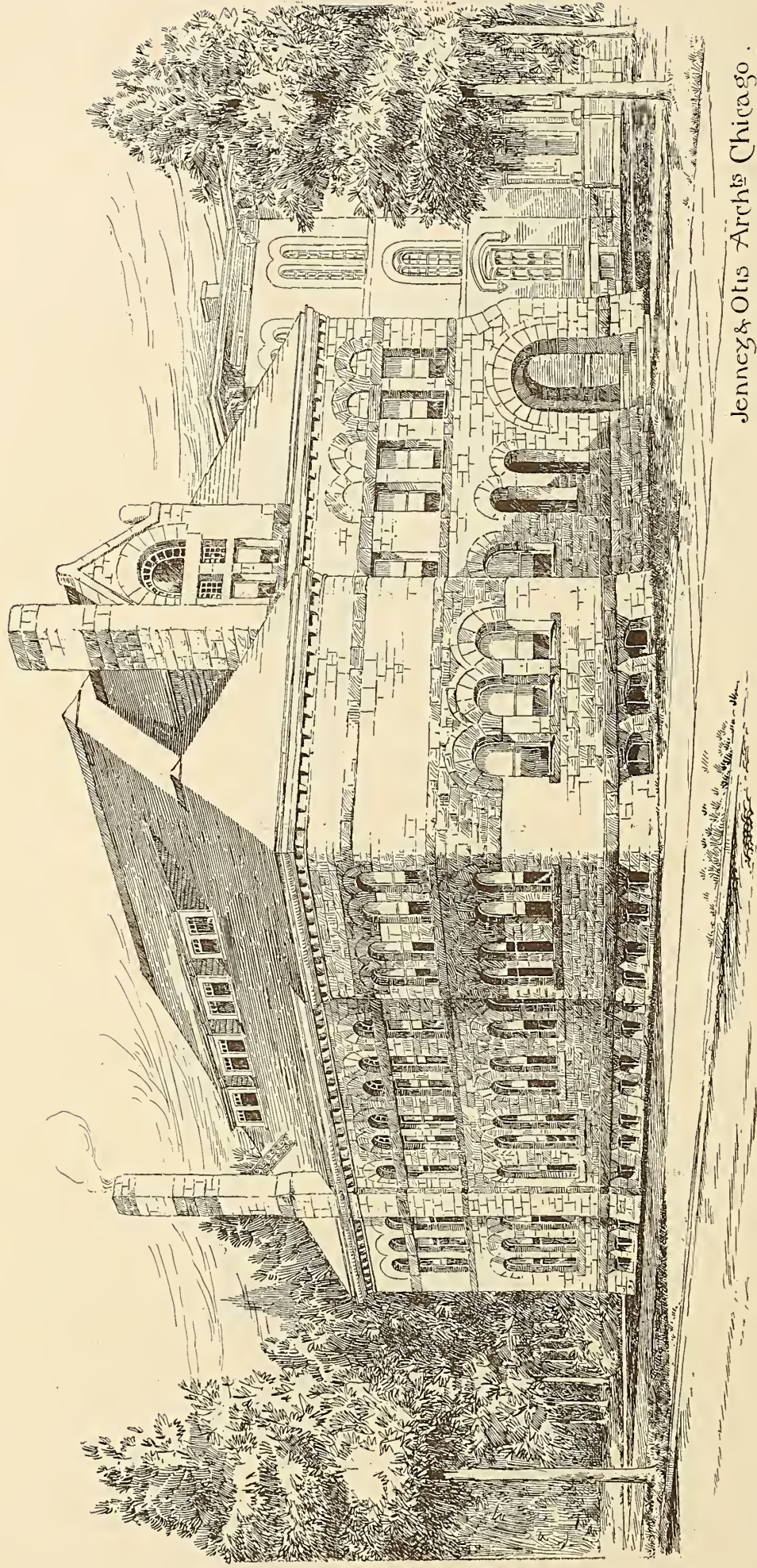
ST. A. D. BALCOMBE,
Chairman Board of Public Works, Omaha, Neb.



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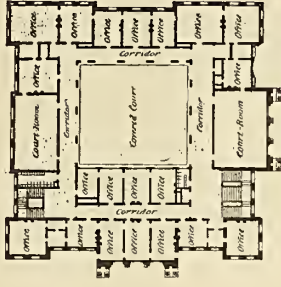
Study for Proposed Addition
ANN ARBOR HIGH SCHOOL



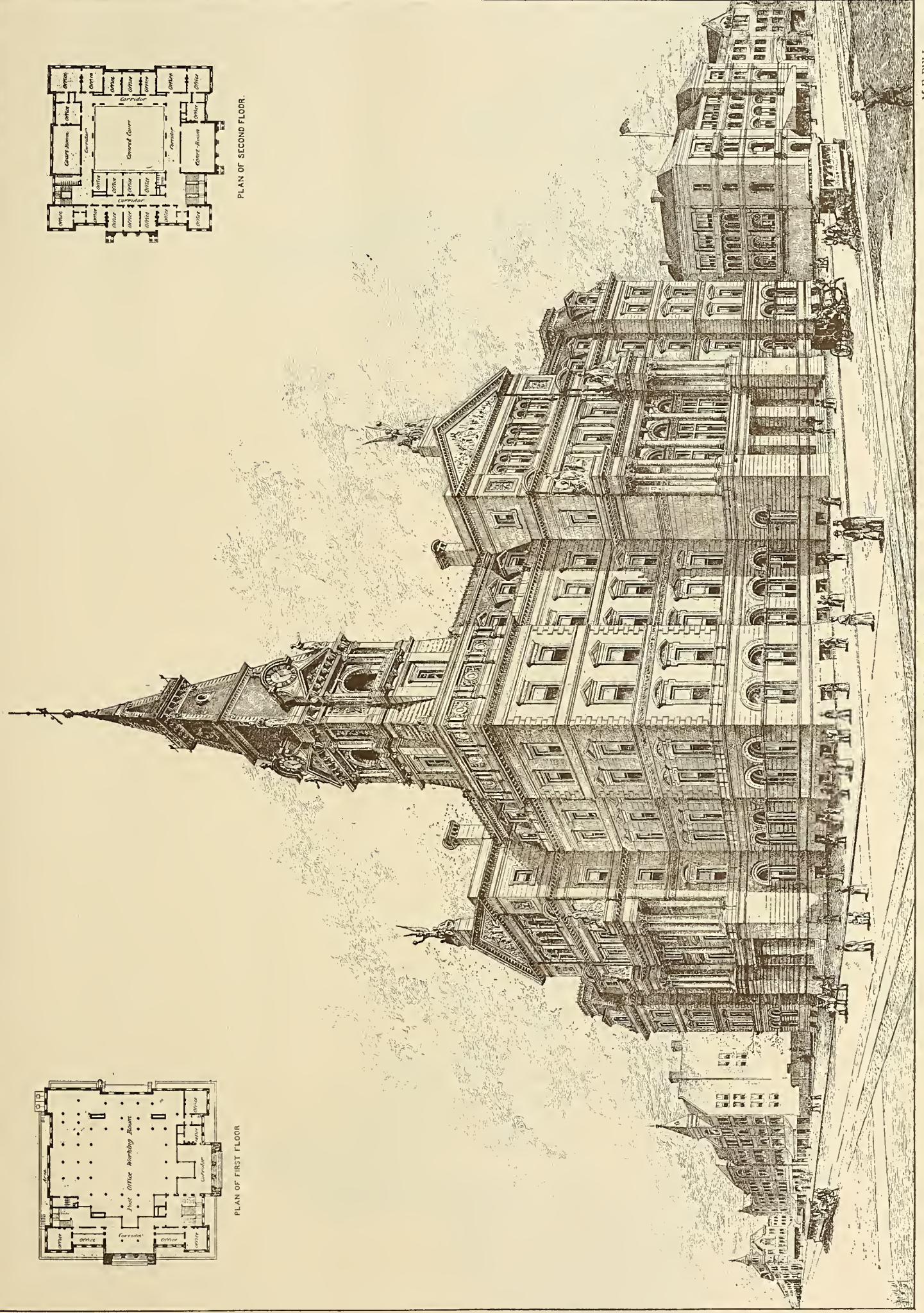
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PLAN OF FIRST FLOOR

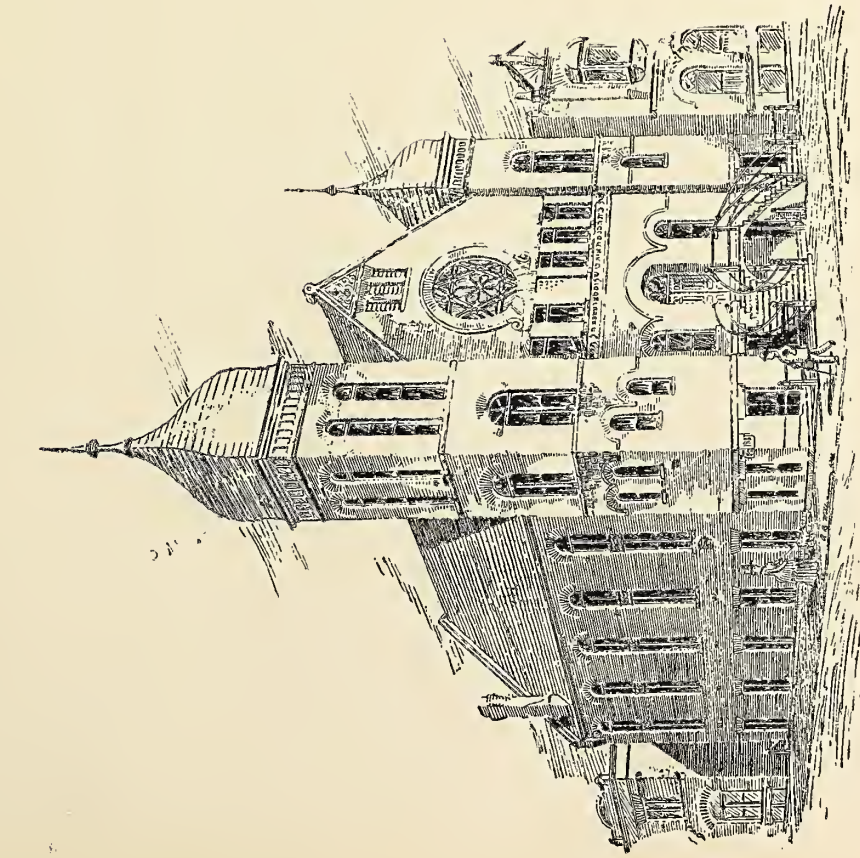


PLAN OF SECOND FLOOR

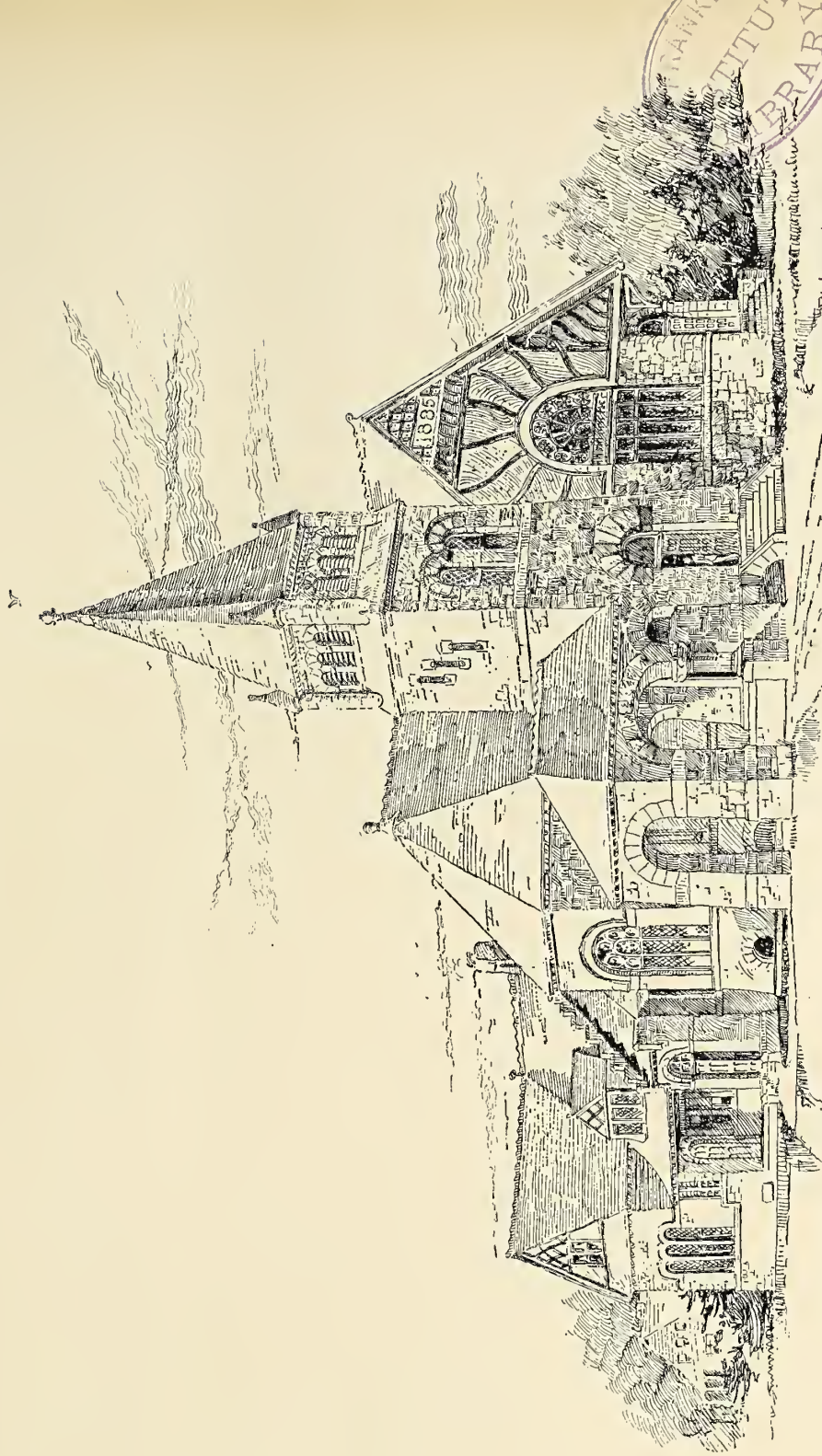


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Synagogue
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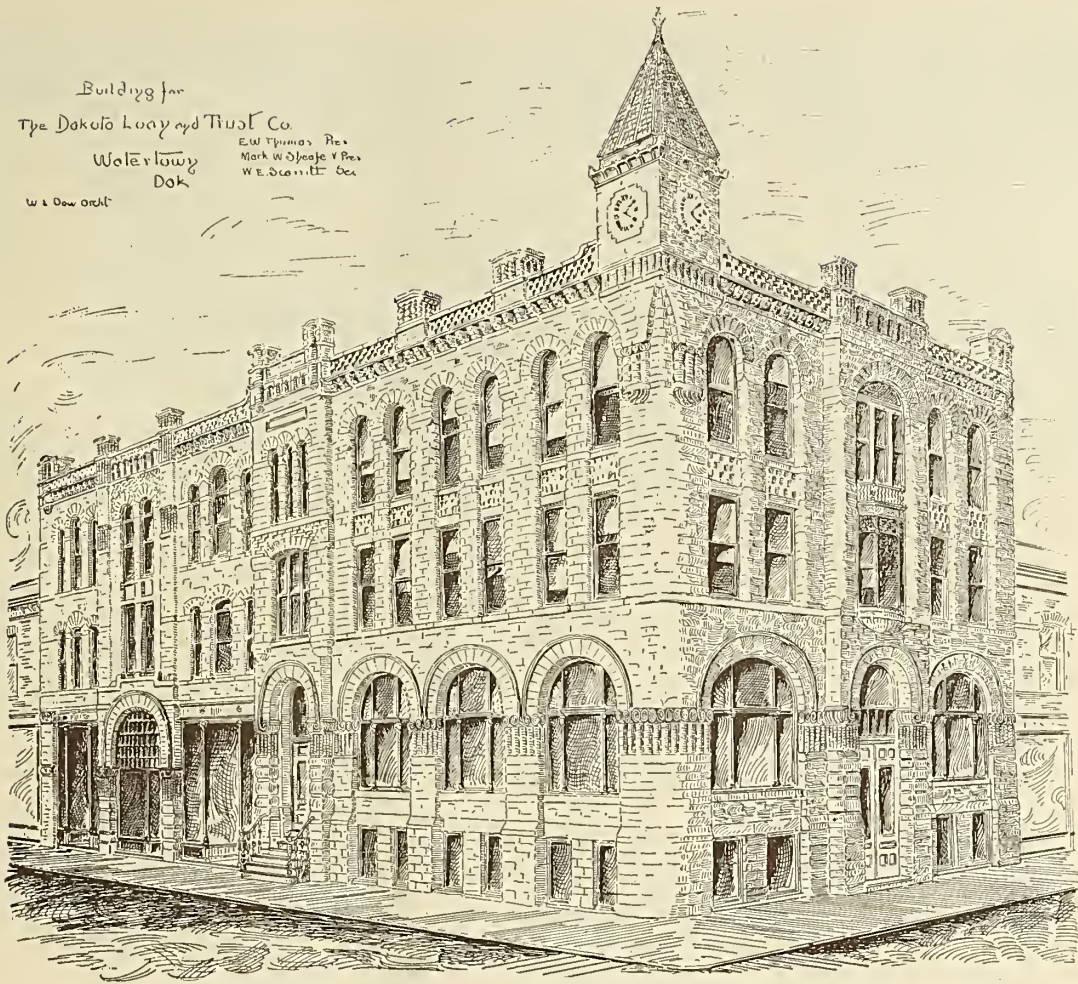


W.W. Boyington Archt.
Chicago Ill.

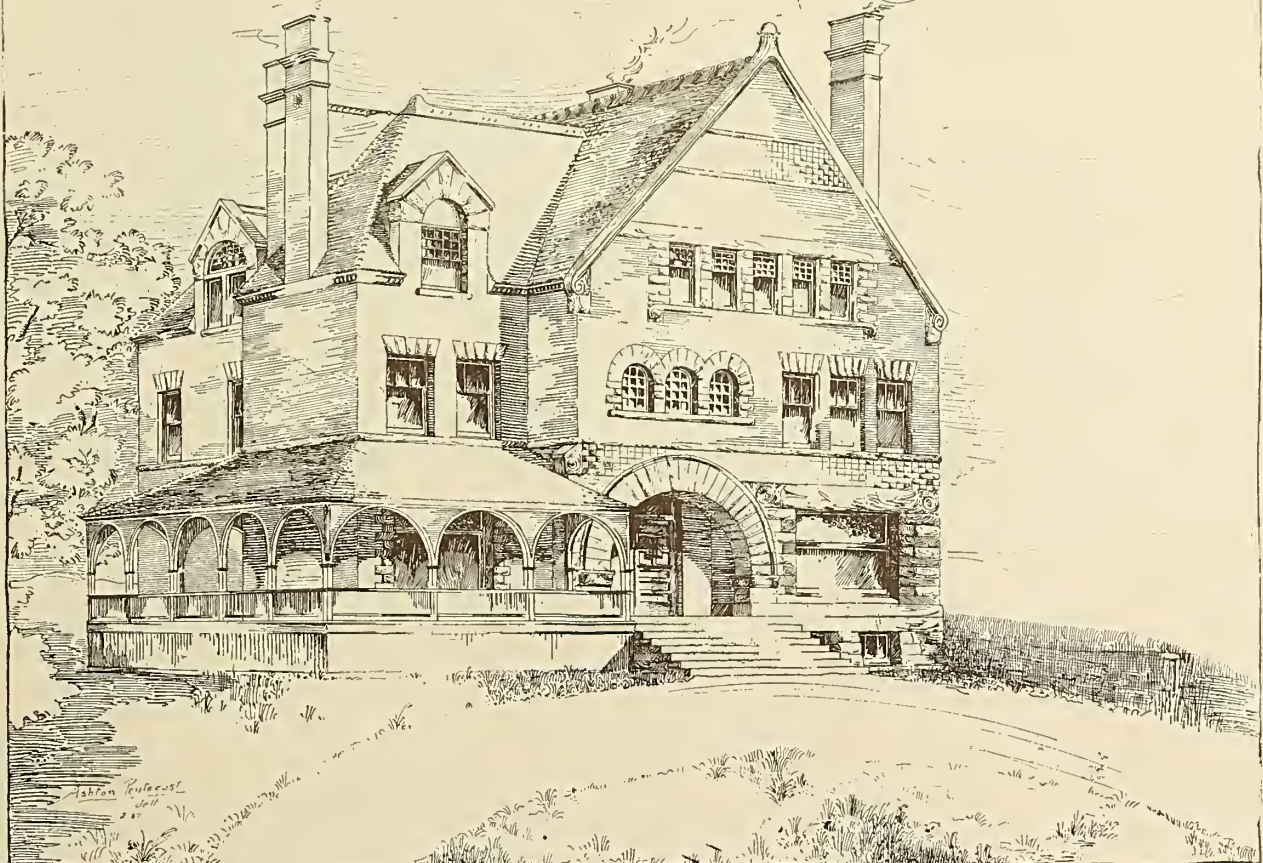
Sketch of Church Forrest
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A MONTHLY JOURNAL (WITH AN INTERMEDIATE NEWS NUMBER AND A PHOTO-GRAVURE EDITION) DEVOTED TO WESTERN INTERESTS.

VOL. IX.

CHICAGO, JULY, 1887.

No. 11

INTERMEDIATE NEWS NUMBER,

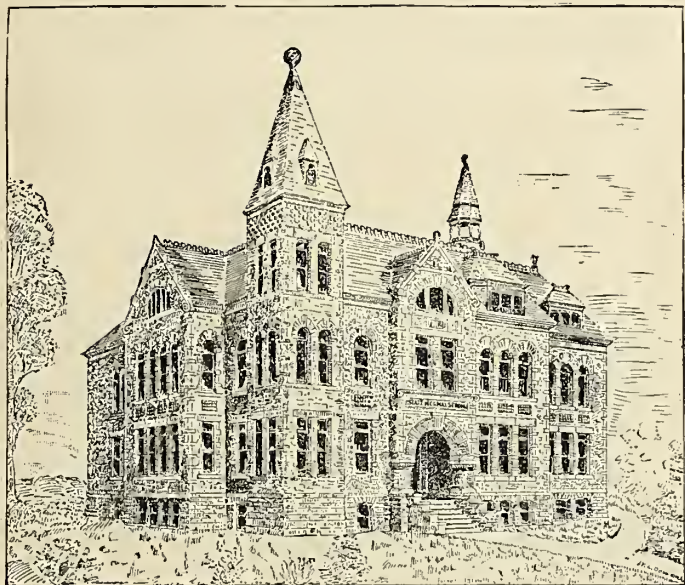
DEVOTED TO

ASSOCIATION AND BUILDING NEWS.

PUBLISHED BY

THE INLAND PUBLISHING COMPANY,

CHICAGO, ILL.



THE twenty-first annual convention of the American Institute of Architects will be held at Chicago on Wednesday, October 19 (the third Wednesday in October). The Committee of Arrangements is A. J. Bloor, W. L. B. Jenney, E. H. Littell and H. L. Gay.

THERE is a strong demand for good draftsmen in Chicago and throughout the West. It costs nothing for draftsmen to secure employment, or architects to obtain draftsmen by communicating with THE INLAND ARCHITECT, and we are always willing, as far as possible, to further the interests of each.

THE Board of Directors of the Western Association of Architects will meet in Chicago on Friday, August 5. This will be the final meeting of the directory of the association before the fall convention. As one of the purposes of

the meeting will be the consideration of applications for membership, it is necessary that all architects who contemplate joining the association before the convention in November should send in their names before August 5.

THE amended mechanics' lien law for the state of Illinois, which went into effect July 1, is being looked upon by architects with a good deal of disapproval, and by contractors with a feeling amounting to consternation. The probable effect upon building is so disastrous as to cause a leading architect to summarize "the lien law first, the settlement of the strike (referring the settlement between the master masons and their journeymen) second, and the recent strike and lockout third." It is probable that its rigid enforcement will lead most surely to its repeal, and meanwhile the contractor, with no capital, will either work as a journeyman, or contract for the owner upon a percentage. The different provisions of this law, as well as the matters pertaining to the present aspect of other labor troubles in Chicago, will be more fully discussed in our next issue.

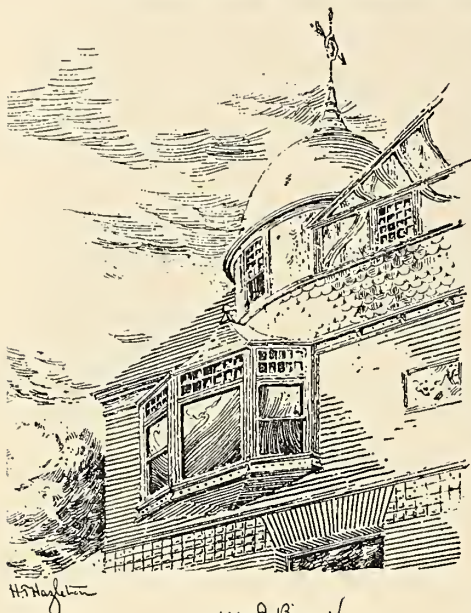
ARCHITECT W. A. FRERET, of New Orleans, has been appointed supervising architect, vice Mifflin E. Bell resigned. Mr. Bell's resignation has been in the hands of the Secretary of the Treasury for a year and a half. His successor is not widely known to the architectural profession, but the *Sanitary Engineer* prints the following biography:

Mr. Freret was born in New Orleans in January, 1833. He was educated in that city and in Baton Rouge. He studied his profession under John Commune, the well-known civil engineer of the South, who had been educated in the Polytechnic School in Paris. Mr. Freret's first appointment was by Major Beauregard to rebuild the State University at Pineville. He continued the practice of his profession until the breaking out of the war, when he joined the Fifth Company, Washington Artillery. He served on the staff of General E. Kirby Smith in the Kentucky campaign, and remained with him as Major of Engineers until the end of the war, after which he turned his attention to sugar-planting. He was appointed State Engineer by Governor Baker, and served until removed by General Sheridan. He has devoted himself entirely to his profession since 1872. He is a son of William Freret, who was mayor of New Orleans in 1852. Mr. Freret built the University of Alabama and other large buildings in the South. He was recommended by the Louisiana congressional delegation, Generals W. S. Hancock and E. Kirby Smith, Senators Coke, of Texas, and Walthall, of Mississippi, and G. B. Nicholson, chief engineer, Cincinnati Southern Railroad.

As the biography shows, Mr. Freret is simply a political appointee. Whether he has architectural ability will remain to be seen. We hope for his own sake, and that of the country, that he has, and would aid and encourage him in his work in every way possible; but his appointment to this important office is a guarantee of nothing more than that he has powerful friends in the present administration. This appointment is another strong argument in favor of the passage of the bill for the reorganization of the office of supervising architect by the next congress.

Chicago Builders' and Traders' Exchange.

MASTER MASONS' AND BUILDERS' ASSOCIATION.



M. F. Tuley
Arch't.

THE committee met as appointed, June 30, the first business done being the selection of an umpire, having the casting vote in case of a disagreement. After three days' conference, the joint committee, July 2, decided upon Judge Murray F. Tuley, chief justice of the Circuit Court of Illinois, and a man of undoubted judicial ability.

A week was given to the discussion of the question in hand, each side giving their views, and when a tie vote was cast Judge Tuley ruled upon the

question at issue. The entire conference was most amicable. The following is the report of the Arbitration Committee:

To the Union of the United Order of American Bricklayers and Stonemasons, and to the Master Masons' and Builders' Association.

The Joint Committee of Arbitration, composed of an arbitration committee of five from each of your organizations, with Judge M. F. Tuley unanimously selected as umpire, have concluded their labors and respectfully report:

That recognizing the fact that organizations of employes and employers, like those from which this committee originated, do exist and have become important factors in our industrial society, and that they will, in all probability, continue to exist, we did not attempt to determine whether the motives or basis of either organization were right or wrong. They appear to be a necessity, arising out of the present conditions of society, and while such combinations keep "from violence or show of violence," no great danger need be apprehended. Nor did we attempt to determine which organization was to blame for the present paralyzed condition of the building industry of this great city.

We recognized the fact that the two organizations between which there should be many "bonds of sympathy and good feeling," were carrying on a bitter war with each other, by which many thousands of men were deprived of work, much suffering and privation brought upon innocent parties, and immense pecuniary losses daily sustained; and we determined, if possible, to reconcile the differences and place the relations of the two organizations upon a basis by which strikes, lockouts, and other like disturbances, might in future be avoided.

We discussed the relations of the contractor and the workmen, and found much in which they had a common or joint interest and were mutually concerned. We endeavored to discuss and settle each trouble and grievance in a conciliatory spirit, not in way of compromise, to give and take, but in a spirit of fair play, and upon just and equitable principles.

We found that the main cause of trouble was in the separate organizations endeavoring to lay down arbitrary rules for the regulation of matters which were of joint interest and concern, and which should be regulated only by both organizations by some species of joint action. We therefore determined upon, and submit herewith, a project for the institution of a joint standing committee for that purpose. The article herewith submitted, providing for such a standing committee, to be elected annually in the month of January, defining its powers and duties, we request shall be incorporated into the constitution of each association.

This joint committee will be constituted of an arbitration committee of five members from each organization (the president of each being one of the five), and an umpire, who is neither a working mechanic, nor an employer of mechanics, to be chosen by the two committees. This joint committee is given power to hear and determine all grievances of the members of one organization against members of the other, and of one organization against the other.

To determine and fix all working rules governing employer and employe, such as

First. The minimum rate of wages per hour.

Second. The number of hours of work per day.

Third. Uniform pay day.

Fourth. The time of starting and quitting work.

Fifth. The rate to be paid for night and Sunday work.

And questions of like nature.

And it is also given power to determine what number of apprentices should be enrolled, so as to afford all boys desiring to learn the trade an opportunity to do so, without overcrowding, so as not to cause the coming workman to be unskilled in his art, or the supply of labor to grossly exceed the demand therefor.

It is also given exclusive power to determine all subjects in which both organizations may be interested, and which may be brought before it by the action of either organization or the president thereof.

It becomes necessary, in order that the questions and grievances which this committee has settled, and to make the Constitution and By-Laws of the two organizations conform thereto, and to the powers given to future joint arbitration committees, that some changes should be made in such constitutions and by-laws. The adoption by the Master Masons' and Builders' Association of the article for the joint committee, recommended, together with some slight changes in their constitution, will be sufficient. The United Order of American Bricklayers and Stone Masons will be necessitated to make changes in its constitution and by-laws to make the same consistent with, and to conform to the spirit and intent of the powers and duties conferred on the joint committee; and, among other things,

The officer heretofore known as the walking delegate is to be known as the collector, and all the objectionable duties and powers of the office have been done away with.

The steward, while he remains the guardian of the men's interests, and mediator for them, his arbitrary powers are taken away.

The interests of the members of the union are protected by the foreman being required to be a member of the union, but he is restored to his position as the employe of the contractor, and while so employed is not subject to the rules of the union.

The eight hour day has been conceded to the workmen. It is in accordance with the state law, and, we believe, in accordance with the spirit and progress of the age.

The question of pay day, whether on Saturday or on Tuesday, was not considered a question of vital importance, but it being one of the questions left to the umpire, he decided, that inasmuch as Tuesday has been the pay day with the principal contractors in the trade of this city for more than twenty years last past, and as experience in other trades and occupations has demonstrated that the pay day of Monday or Tuesday has worked more beneficially to the workmen and their families than the Saturday pay day, and inasmuch as contractors ought not to be required to change the pay day in the midst of the working season, having presumably made their pecuniary arrangements to meet the Tuesday pay day, he would name Tuesday as the regular pay day until the same should, if desired hereafter, be changed by the joint committee on arbitration.

Your committee has also fixed the working rules, which are appended hereto.

While not wishing to encourage disloyalty to either organization, your committee are unanimously of opinion that those members of either organization who have from actual necessity broken the rules of their organization, by working or carrying on work during the late trouble, should not suffer any fine or other penalty, and we ask your approval of the annexed resolution to that effect.

We have settled the differences between the two organizations. While every inch of the ground has been fought over, yet, having the task assigned us, we, in good faith, determined to do everything that was fair, just and honorable to accomplish our object, we feel we have succeeded without compromising the honor, the rights, or the dignity of either organization, and hope that we have succeeded in establishing a basis upon which all future troubles may be settled, and probably prevented.

We respectfully ask your adoption of this report, and the article as to the Joint Arbitration Committee by immediate action, to the end that work may be commenced on Monday next, it being agreed that neither organization shall be bound by its action if the other should refuse to take similar action.

The joint committee also agreed upon the following working rules, which were established by being adopted by both organizations interested:

WORKING RULES.

SECTION 1. The minimum rate of wages shall be forty cents per hour.

SEC. 2. Eight hours shall constitute a day's work throughout the year, including Saturday and Sundays, including the noon hour, work to begin at 8 A.M. and end at 5 P.M., but the noon hour may be curtailed by special agreement between the foreman and the majority of the workmen employed at any job, but not in such a way as to permit more than eight hours' work between the hours named.

No member will be allowed to work over time except in a case of actual necessity. For such over time, time and one-half shall be allowed.

SEC. 3. Eight hours shall constitute a night's work. Night work shall not commence until 7 P.M. and shall be paid for at time and a half. Sunday work shall be paid for at double time.

SEC. 4. Any member of this union working for a mason contractor shall be paid every two weeks regularly on Tuesday before 5 P.M.

RESOLUTIONS.

Resolved, That all members of the United Order of American Bricklayers and Stone Masons who have from actual necessity taken up their work during the present strike, or lockout, and have thereby violated any rule of said organization, shall be reinstated within two weeks of the execution of the award of this arbitration committee, and shall not be fined or suffer any penalty for said violation of rules. And further,

Resolved, That all members of the Chicago Master Masons and Builders' Association who have from actual necessity started to work with union men, and in opposition to a resolution of such organization, shall not be fined or suffer any penalty for such infraction of the rules and shall be considered in good standing.

A. E. VORKELLER,
P. J. MINITER,
JOHN PEARSON,
FRED. DRIEBUSCH,
CHAS. J. LINDGREN,
GEO. C. PRUSSING,
JOS. DOWNEY,
GEO. TAPPER,
WILLIAM O'BRIEN,
CHAS. W. GINDELE,

Arbitration Committee of the
United Order of American Brick-
layers and Stone Masons.

Arbitration Committee of the
Master Masons and Builders'
Association.

M. F. TULEY, Umpire.

The following amendments to the constitution and by-laws of the two organizations were formulated as part of the joint committee's report:

ARTICLE X.

SECTION 1. This organization shall elect at its annual meeting in January a Standing Committee of Arbitration, consisting of five members, to serve for one year. The present standing committee shall continue in office until the election of its successor in January, 1888.

SEC. 2. The president shall be *ex-officio* one of said five members. He shall be chairman of committee. In his absence the committee may designate one of its members to act in his place.

SEC. 3. Within one week after the election the president of the United Order of American Bricklayers and Stone Masons shall certify to the Chicago Master Masons' and Builders' Association, and the president of the Chicago Master Masons' and Builders' Association shall certify to the United Order of American Bricklayers and Stone Masons the fact that said committee has been regularly elected, and give the names of members thereof.

SEC. 4. When notice of the selection of a committee of arbitration by the other association shall be received, or as soon thereafter as practicable, and within the month of January, the two committees shall meet and proceed to organize themselves into a joint committee of arbitration by electing an umpire, who is neither a working mechanic nor an employer of mechanics. The umpire, when present, shall preside at meetings of the joint committee, and have the casting vote on all questions.

SEC. 5. Seven members, exclusive of the umpire, shall constitute a quorum of the Joint Arbitration Committee, and in case of the absence of any member, the chairman of his committee shall cast the vote for such absent members. A majority vote shall decide all questions.

SEC. 6. The Joint Committee of Arbitration shall hear all evidence in complaints and grievances of a member or members of one body against a member or members of the other, or of one organization against the other, referred to it by the president of either association, and shall finally decide all questions submitted, and shall certify such decision to the respective organizations.

Work shall go on continuously, and all parties interested shall be governed by award made or decision rendered; provided, however, that work may be stopped by the joint order of the presidents of the respective associations until the decision of the joint committee is had.

SEC. 7. The Joint Committee shall have exclusive power to determine and fix definitely from year to year all working rules. It shall also have exclusive authority to discuss and determine any and all other subjects in which both organizations, or members of both organizations, may be jointly interested and concerned, which may be brought before the committee by either organization or the president thereof.

SEC. 8. Working rules are all rules governing employers and workmen at work, such as the establishment of a minimum rate of wages, to be paid practical bricklayers and stonemasons per hour, and of a uniform pay day; to determine the number of hours to be worked per day, the time of starting and quitting work, the remuneration to be paid for work done overtime and Sundays, and other questions of like nature.

SEC. 9. The subject of apprentices being a matter of joint interest and concern to both the Union and the Master Masons' and Builders' Association, the joint committee shall have power to decide from time to time the number of apprentices which master masons may take into service.

SEC. 10. This article having been agreed upon by the Union of the United Order of American Bricklayers and Stone Masons, and the Master Masons' and Builders' Association, shall not be repealed or amended by either organization except upon six months' previous notice given to the other organization, and such notice shall not be given until after all honest efforts to settle the grievance or difficulty shall have been made.

Until further action by said committee all master masons shall be allowed a new apprentice each year, and the term of apprenticeship shall be three years; but any minor taken as apprentice shall be under nineteen years of age. All apprentices shall be allowed to join any organization of their craft, but to be subject to the laws of this state and the contract of apprenticeship made in pursuance of such laws.

Judge Tuley made the following interesting decision upon the apprenticeship question, which was also incorporated into the report:

A limitation upon the number of apprentices in a craft has always existed, either by legislative action or by custom of the craft, and the number that should be taken must be affected to a large extent by the general principles of the demand and supply of labor.

In France in the seventeenth century masters were limited to one apprentice. In England in the beginning of the eighteenth century apprentices became so numerous, and because of their numbers, when they became workmen were so unskilled that some crafts were for a time utterly ruined. Laws were passed from time to time limiting the number of apprentices in the trades and crafts; some to two apprentices; some to the sons of master workmen and employers, and some to sons of persons who had a £3 annual rental.

It is a law of self-preservation to the craft, and also of equal interest to the responsible master mason, that there should be some limitation on the number of apprentices.

If the number is unlimited unscrupulous contractors may secure a large number of apprentices, and, with the help of a few journeymen, underbid all contractors who employ journeymen skilled in their craft, and also necessarily throw upon the journeymen large additions of unskilled workmen, thereby making the supply of labor largely in excess of the demand, and destroying the standard of the craft for good work.

It is not a question as to whether everybody shall have the right to learn a trade, but whether the craft will teach every boy a trade—to its own destruction.

It is a matter, however, that neither the journeymen or the master masons' organizations should arbitrarily undertake to decide. It is a matter of joint interest, and should be decided from time to time by the joint arbitration committee in such manner that the number of apprentices shall

be sufficient to furnish the requisite number of journeymen to supply the demand, and also so as to prevent an abuse of the apprentice system, and an injury to both employer and employé by a too large number of apprentices being secured to do work that should be done by the skilled journeyman.

Three years, by common consent, is the period fixed for apprenticeship in these trades, and the master mason should be allowed, and, if necessary, required to take one new apprentice each year.

The number of apprentices can be increased from time to time, as the interests of the crafts and its obligations to the youth of the country should demand.

The apprentice should be allowed to join any organization of his craft, but in all respects be subject to the law of the state and the contracts made in pursuance thereof.

The report was submitted to the bricklayers union, July 8, and ratified by it, and on the 9th was ratified by the master masons' association, the committee receiving a vote of thanks for the able manner in which the work had been performed, and were continued as a standing committee on arbitration until the annual meeting next January.

William O'Brien moved that inasmuch as the word "master" had become obnoxious, and did not accord with the spirit of the age, the association change its name, leaving off the word mentioned. The motion was carried, and what was the "Master Masons' and Builders' Association" will in the future be known as the "Masons' and Contractors' Association of Chicago."

The constitution and by-laws of the union are being entirely redrawn to conform with the different provisions of the arbitration committee's report.

CARPENTERS' AND BUILDERS' ASSOCIATION.

The regular meeting of the association was held June 14, President William Hearson in the chair.

A communication was received from a committee of the carpenters' council, suggesting that the "white winged messenger of peace" should hover over both bodies—the master carpenters and the workmen—and suggested that, if the Carpenters' and Builders' Association desired to submit any communication to them, it would be received and carefully considered. The communication was received and placed on file.

Mr. Frank Blair presented the following resolutions, which were laid on the table by a vote of 27 yeas to 20 nays:

WHEREAS, It is apparent that there is a disposition shown in all branches of the building trades to adjust the differences existing between employers and employés, and

WHEREAS, It is for the best interests of the city of Chicago and all persons interested in building, that harmony should prevail between employers and their workmen at all times; and,

WHEREAS, The working carpenters, at a mass meeting held July 13, arranged for the appointment of a standing committee of arbitration; therefore be it

Resolved, That the Carpenters' and Builders' Association shall elect an arbitration committee of five members, which committee shall have full power to confer with the arbitration committee of the working carpenters, to ascertain what grievances are desired to be submitted to arbitration, and if the committee then should elect to arbitrate the pending differences between the Carpenters' and Builders' Association, the said committee is hereby authorized to meet with the arbitration committee of the working carpenters, and fully adjust all pending differences, either with or without the selection of an umpire.

Resolved, That it is the sense of this meeting that there should be a standing committee of arbitration, which shall have full power to adjust all grievances between employers and employés, in order that strikes and lockouts may be avoided.

The resolution was laid on the table.

A motion to return to eight hours as a day's work, at thirty cents an hour as a minimum wage, upon the same basis as adopted in April, was discussed, and also laid on the table by a vote of 29 to 18.

The meeting adjourned to the next regular meeting, August 11, or at the call of the president.

A special meeting of the association was called by the president, and met July 23, to consider several communications which had been received by the secretary from the carpenters' union. The attendance numbered about eighty, and was almost a unit on the questions presented. Two propositions from the carpenters' council—one asking for a joint arbitration committee, and the other giving the names of the arbitrators appointed by the union—were laid on the table without discussion, a motion to that effect having been made by Mr. Waddell. A third communication was read twice, and then, on motion of Mr. Kauff, was also laid on the table. It was as follows:

To the Carpenters' and Builders' Association of Chicago:

GENTLEMEN,—Believing that all differences now existing between employer and employé can be arranged to the satisfaction of all parties concerned, we, the committee on arbitration appointed by the united carpenters' council of Chicago and vicinity, respectfully submit the following propositions for your consideration. We ask:

1. The establishment of a uniform working day.
 2. The establishment of a minimum rate of wages.
 3. For the establishment of a minimum rate of wages for overtime.
 4. For the establishment of a minimum rate of wages for Sunday work.
 5. For the reestablishment of the apprentice system.
 6. For the definition of the foreman's position.
 7. The recognition of our right to refuse to work with non-union men.
 8. For the adoption of a code of working rules.
 9. For the settlement of all other differences between employer and employé.
- Trusting that your association will readily see sufficient grounds for arbitration, we are very respectfully yours,

W. WHITE, President,
H. T. CASTLE, Secretary,
R. L. HASSELL,
ROSCOE PALMER,
A. S. F. BALLANTINE,

Committee on Arbitration for the United Carpenters of Chicago and Vicinity.

The action of the association in summarily disposing of the communication was applauded. Mr. Mavor then presented the following resolution:

Resolved, That from now until January 1 the contracting carpenters work as they please without reference to the question of the number of hours which shall constitute a day's work.

The motion was unanimously adopted and the meeting adjourned.

After the meeting the members very generally expressed the belief that there would be no strike, as there was nothing to strike for, and there was nothing to arbitrate. They said they had conferred with their employés and were advised that none of them would quit work, as they were perfectly satisfied with both hours and pay.

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PROPOSALS.

TO ARCHITECTS, SCULPTORS AND DESIGNERS.

OFFICE OF THE BOARD OF COMMISSIONERS OF THE
 STATE SOLDIERS AND SAILORS' MONUMENT,
 INDIANAPOLIS, IND., JULY 11, 1887.)

This Commission will receive at their office in the city of Indianapolis, on or before the 12th day of December, 1887, designs and plans and specifications for a State Soldiers' and Sailors' Monument, or Memorial Hall, or Monument and Memorial Hall combined, to be erected on the grounds known as Circle Park, in the city of Indianapolis (a city of 100,000 inhabitants and the capital of the state of Indiana), according to an Act of the General Assembly of Indiana, approved March 3, 1887, appropriating the sum of \$200,000, and directing the expenditure of the same and additional donations for the erection of said structure.

Such plans or designs as are offered will be submitted to thorough examination of a board of three competent experts, to be elected by this Board, consisting of one architect, one builder and one civil engineer, whose names will be announced to competitors upon their selection, and prior to their examination of the plans.

All plans and specifications and designs, in order to receive attention from this Board, must be accompanied by a full description of the work and of the materials to be used, with itemized estimates complete in every detail of the cost of every portion of the work, and of the total cost of the same, which must not exceed \$200,000.

One thousand dollars will be paid as a premium for the best plan or design, provided the same is accepted by this Commission, and \$500 for the second best, subject to the terms and conditions of the law; but no premium will be paid if no plan or design is adopted.

All express, or other transportation charges, etc., on packages containing plans or designs, must be fully prepaid. All rejected plans will be returned at owner's risk and cost, the Board being responsible only for due care in delivery of same for shipment.

All plans and designs submitted are to be understood to be subject to the terms, conditions and limitations of the law, and the right of the Board of Commissioners to reject the same is hereby reserved.

For further information, copy of the law, diagram and description of the location, rules governing the competition, and instructions to competitors, etc., apply to the secretary.

JAMES F. GOOKINS, Secretary.
 GEO. J. LANGSDALE, President.

NOTICE TO CONTRACTORS.

Sealed proposals for the heating and ventilation, new cell block, boiler stack, conduit, and water supply for the State House of Correction and branch of State Prison in the Upper Peninsula, at Marquette, under Act No. 346, 1887, are invited by the board of commissioners of said House of Correction and Prison until Wednesday, August 24, 1887, at 3 o'clock p.m.

Plans, specifications and instructions to bidders may be seen on and after July 23, 1887, at the office of the commissioners, Marquette, and at the office of the architects, Scott & Co., 405 Wayne County Savings Bank Building, Detroit, Michigan.

Proposals must be submitted separately for the Heating and Ventilation, cell block, conduit, boiler stack, and water supply, and the board of commissioners reserve the right to reject any and all bids.

Proposals to be submitted on the schedule blanks and accompanied by a copy of instructions to bidders, both of which will be furnished to intending bidders upon application to the secretary of the board.

All bidders will be required to furnish bond and security or certified checks payable to the order of the board of commissioners equal in amount to 5 per cent of the bid submitted, which bond or certified check will be forfeited to the board of commissioners in the event of the failure or refusal of the bidder to enter into contract with the board should his bid be accepted. All proposals must be sealed and indorsed, "Proposals for work on State House of Correction and Branch of State Prison, Upper Peninsula," and be addressed to the board of commissioners, Marquette, Michigan.

For further information apply to the Secretary of the Board at Marquette, Michigan.

E. P. ROYCE,
 President of Board of Commissioners for State House of Correction and Prison, Upper Peninsula.

Attest,
 GEO. P. CUMMINGS,
 Secretary.
 Marquette, Michigan, July 20, 1887.

PROPOSAL.

OFFICE OF THE SECRETARY
 ILLINOIS SOLDIERS' AND SAILORS' HOME,
 QUINCY, ILLINOIS, July 18, 1887.)

Sealed proposals will be received at this office until 2 p.m., on the 20th day of August, 1887, for all labor and materials to build and complete a Hospital and from three to twelve cottages for the Illinois Soldiers' and Sailors' Home located at Quincy, Illinois.

Each proposal must be made on a printed form furnished by the Secretary, and must be accompanied by a certified check for \$1,000.00, made payable to the Trustees of the Illinois Soldiers' and Sailors' Home.

The right to reject any or all bids is reserved.

The plans and specifications can be seen at this office after the first day of August, 1887.

S. B. SHERER,
 Secretary.

NOTICE TO CONTRACTORS.

Sealed proposals will be received at my office until 10 o'clock a.m., of August 9, 1887, for the erection of a Court House for Noble County, Indiana, at Albion.

Plans and specifications may be seen at my office, also at the office of E. O. Fallis & Co., architects, 48 and 49 Chamber of Commerce, Toledo, Ohio, to whom all inquiries may be addressed.

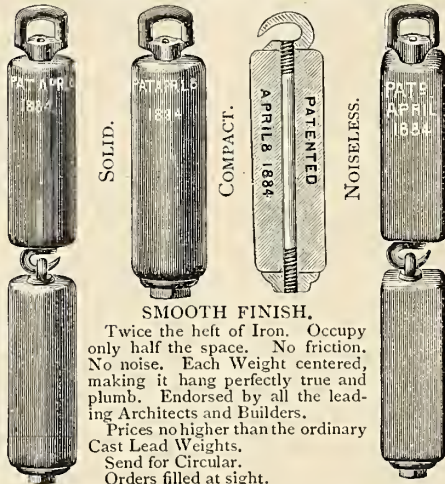
The right to reject any and all bids is reserved.

By order of the Board of Commissioners.
 CORNELIUS B. PHILLIPS,
 Auditor, Noble Co., Ind.

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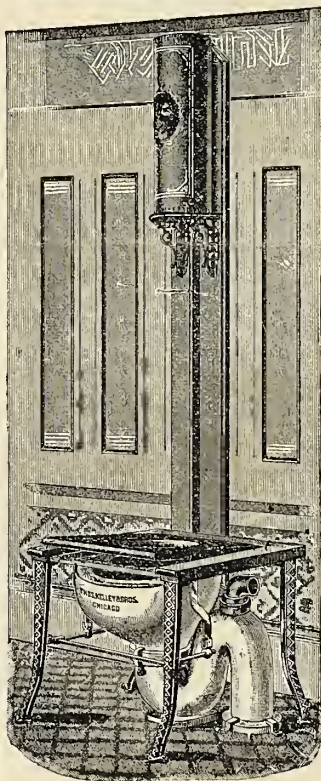
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DECIDEDLY the most important matter now before the building interest of Chicago is the amended lien law, which went into effect July 1. The law, as amended, is printed in full elsewhere, and also reports of special meetings held by the Chicago Builders' and Traders' Exchange and the Illinois State Association of Architects. As we have said, the stringency of the law is such that its repeal by the next legislature is almost certain, and it may call for a special session for this purpose this fall. It has some good points, however, as it stands. It will "weed out" a great many contractors that hamper the building interest, by taking work below the cost of its production, and, not having means to carry out the work and stand the loss, involve owners, architects and material-men in endless trouble and litigation. It may raise the price of building, but will tend to place contracts in the hands of contractors who have money to carry on work without the aid of certificates from the architect, and occasion fewer delays through lack of material and sufficient workmen. If it is again brought before the legislature, the associations above named should see that committees be formed, and a proper and equitable law drawn and made to replace the one now in force. It should look to the better protection of the workman, reaching, if possible, to those of the sub-contractor, or, better still, abolish the sub-contractor entirely, except where he is a manufacturer. It should also tend to give the contractor with little capital a chance to compete upon equal terms with his more wealthy neighbor, if his skill and probity are equal. There are already too many laws that protect and nourish those who have accumulated wealth, to the detriment of those who have not, and no greater damper can be placed upon building enterprise in this country than by establishing a monopoly controlled by the few. This is the strongest tendency of the present law, and acts in this way against architects as well as contractors.

WHILE the law is sweeping in its provisions, and calls for a statement of account with all workmen, the interpretation should deal only with those of contractors *per se*. For instance, if a manufacturer of architectural iron-work takes a contract, while the law calls for the name of, and rate of wages paid to the man who draws the pattern and models it, the interpretation should only cover the man who sets the work in the building, the workman in the foundry looking to the proprietors of that foundry for his pay rather than to the immediate work in hand. The same rule would apply to stone quarries, steamfitters, and all other contractors who manufacture. In other words, the courts will have to rule that nothing is subject to lien that cannot be directly traced to the building. As may be seen by the report of the State Association of Architects, the present interpretation of the law is speculative, and until a ruling has been made on, not one, but many of its provisions by the Supreme Court, this is all that can be done. The association will distribute blank forms of affidavit, contract, certificate, and waiver of lien, which will be used by its members. Each architect will probably find that these forms can be altered to better suit his particular practice, with the general form as a basis. One thing the inconvenience occasioned by this law will teach, is, that it will be advisable for associations of contractors and architects to watch the proceedings of legislatures, not only in Illinois, but in every other state, so that laws so closely affecting their interests may be examined before their passage.

PREPARATIONS for the coming convention of the American Institute of Architects, which will be held at Chicago, October 19, are already occupying the attention of the fraternity, both the Illinois State Association and the Chicago chapter of the institute making plans for the proper reception of its members. At a special meeting of the State Association, held August 5, the matter was placed in the hands of the executive committee, to act conjointly with the Chicago chapter to provide suitable entertainment. Chicago's forty-five miles of boulevards, and the parks will be shown to impress the visitor with the city's surroundings, and the residences and office buildings of the city will support the substantial claims Chicago has won to architectural greatness. In this direction the home architects will make their greatest effort, and there is little doubt but that the visitors, especially those from the East, will return, as all who visit Chicago do, with a feeling that they have been splendidly entertained. Every member of the Institute should make a special effort to be present, and every Chicago architect should arrange his business so that he will be free to devote his time as entirely as possible to the entertainment of that honored body, that has for over twenty years represented the profession of architecture in the United States.

IT is now apparent that the fourth annual convention of the Western Association of Architects will be most enjoyable. The past three conventions have been full of hard work, with long sessions; and it is proposed by the directory to make the social element predominate in this, so that architects will become better acquainted with each other. Fortunately, the programme of entertainment outlined by the Association of Ohio Architects, in conjunction with the Cincinnati chapter of the state association, will greatly aid this. While arrangements have not been perfected, it is proposed by them to give the visitors a trip through the South, taking in the Mammoth Cave, in Kentucky, and other points of interest. The business that will come before the convention will not be as extensive as in former years, and, on the whole, the visit to Cincinnati will be largely one of pleasure and rest. The secretary of the association has already presented a large number of applications for membership to the board of directors, and will probably receive many more before the date of the convention. As the constitution calls for these applications to be in the hands of the secretary at least thirty days before the convention, names should be received before October 15. All members who have papers, or other matters of interest to bring before the convention, should send them to the secretary before that date. We would also call the attention of the different committees having reports to make, that these should be carefully prepared, so that sessions of the convention may not be needlessly prolonged.

L'EMULATION, the official journal of the enterprising Société Centrale d'Architecture of Belgium, announces an architectural competition somewhat unique in plan and method. Belgium will invite the world to a grand international exposition of arts and sciences at Brussels in 1888. A far from unimportant incidental, financially and otherwise, of such an enterprise is the multitude of side shows, trades and speculations, the sales of soda water, ices, chocolate, confections, pastries, perfumery, jewelry, curiosities, bric-a-brac, also children's games, panoramas, stereopticons, etc. The executive committee proposes to obtain in advance designs for the necessary stalls, pavilions, kiosks, booths, cabinets, etc., for this extensive auxiliary business, so that all the structures erected on the grounds shall be artistic, varied, and of a character to harmonize with the place and occasion,

and add to the general effect instead of marring it, as they often do. They, therefore, invite architects of all nationalities to send them designs for this purpose until August 9, 1887. Architects are entirely unrestricted as to architectural styles or the cost of their structures. They may design singly or for groups of several buildings. Sketches only are desired, to a uniform scale of $\frac{1}{100}$. Five prizes, of two hundred francs each, will be awarded for grouped designs, and five other prizes of the same value for the isolated ones.

THE jury in the Belgian competition is to consist of five members of the executive committee, one delegate from the Central Society of Architects, and two members elected by the competing architects themselves, as follows: Each design is to be designated by a device, which shall also appear on each of two sealed envelopes, one marked as containing the address of the author, the other labeled, "ballot envelope," and containing the full address of two architects proposed as jurors. The executive committee will open these ballot envelopes in advance of the competition, and state that the two architects receiving the highest number of votes will be placed on the jury. There will be a public exhibition of all designs, and parties applying for privileges to sell or trade on the exposition premises in the directions named will be invited to select from these designs, and will be put in communication with their authors. This is substantially the scheme. It is tacitly assumed that neither of the two architects elected by the competitors as their part of the jury will himself be a competitor, also that any such architect will quite certainly be sufficiently at liberty and obliging to serve in this capacity without compensation, and would be a resident of Brussels, or sufficiently near to attend conveniently. Probably in this instance these expectations may be realized, but these contingencies must be reckoned among the possibilities, as also the sickness of a juror, or his intimate personal relation to some competing architect. As the pecuniary amounts involved are not large, and the promoters do not expect to defray the cost of erecting any of the proposed buildings, a pleasant degree of harmony may be looked for among all parties—a sort of amicable lawsuit competition, with most of the savageness of the regular article left out.

OUR readers are doubtless aware that a prominent feature of the coming great French Exposition in Paris, which is far to surpass everything of the kind hitherto attempted anywhere, will be the "Tour Eiffel," an iron tower one thousand feet high, fitted with elevators, and with balconies and a lookout pavilion on top. One of the practical questions is how to protect this tower and its visitors from lightning, its loftiness exposing it in an especial degree to electric discharges. This problem has been intrusted to three experts, Messrs. Becquerel, Mascart, and Berger. This committee recommends that two lines of cast-iron gas pipe, about two feet in diameter, parallel with two opposite faces of the tower, be sunk into the water-bearing stratum, here distant about twenty-five feet below the surface. Each line of pipe would be nearly four hundred feet long. The metallic bases of the tower which will rest on foundations of stone masonry, are to be connected with these buried lines of iron pipe by heavy copper cables or rods, which will enter the ground in wells three feet in diameter, substantially walled up. The object of these wells is to facilitate inspection of the copper conductors at all times and thus insure their being kept in good condition. Each of the balconies, which occur at various elevations, will have lightning rods at each of its four angles, and at intermediate points where necessary. There will also be a rod at the summit of the tower.

The Disposal of Sewage of Isolated Country Houses.*

BY WILLIAM PAUL GERHARD, C.E., CONSULTING ENGINEER FOR SANITARY WORKS.

[Concluded.]

MY description of the system of sewage disposal by subsurface irrigation is, I trust, sufficiently definite to give a correct general idea of it. Having spoken so much in its favor, it is but proper that I should notice and mention the objections which are, at times, brought forward both by professional and by laymen against the system.

1. It is sometimes feared that the land into which sewage is continually poured will, after some years, become saturated with sewage, its surface wet or swampy, and the whole of the irrigation field a large cesspool, spread out laterally instead of downward. There is, however, absolutely no reason for apprehending such trouble. Wherever the soil is not naturally loose and porous, *underdrainage* is essential and must be provided for. If properly carried out, all superfluous moisture in the ground will be removed. *Aeration* is another essential condition, and wherever it is neglected the soil may become saturated with sewage matters. Finally, *intermittency of discharge* is required, with intervals of at least twenty-four hours between consecutive emptyings of the flush tank. Underdrainage of the soil and intermittent action of the flush tank secure the much desired aeration of the subsurface. This secured, oxidation and nitrification, and the destruction of the organic particles attaching to the earth will follow with regularity.

2. Much apprehension is often felt lest such a system will not work properly in winter time, and fear is expressed about the freezing up of the ground about the absorption tiles. Experience with the system in the coldest parts of the New England States has fully removed any doubts on this point. Where the system has been in continuous use, summer and winter, it is found by practical experience that the warmth of the sewage is sufficient to keep the ground at the disposal field from freezing.

3. It is often objected that the necessary intercepting chamber for solids is in reality a cesspool. This is true to some extent; nevertheless, I always advise to build this chamber in connection with the flush tank, but I use the utmost precaution in its construction to make it perfectly tight. As regards this intercepting chamber, it should be remembered that the liquid sewage in it is constantly changed, for a large volume of water passes through it every day. Although the chamber retains organic waste matter partially putrefied, the amount cannot be compared with that in a cesspool. Some of the solid matter is undoubtedly reduced by maceration, and being dissolved, passes into the liquid chamber, from where it is discharged into the absorption drains, to be finally oxidized and rendered innocuous. By cleaning the intercepting chamber once a month, the amount of solid putrid matter may be kept down to a minimum; consequently there will be little if any exhalation of gases of putrefaction, and inasmuch as the water level remains constant—the intercepting chamber being always filled to the overflow level—gases are not forced out as in the case of ordinary cesspools. By means of proper ventilation the intercepting chamber may be kept quite free from offense.

Perhaps I should mention here that owing to these objections attempts have repeatedly been made to do away with the intercepting chamber. But in all cases where water-closets are used and their contents discharged into the tank, it becomes imperative to prevent the solid portions of the sewage from clogging the tiles, and the syphon which discharges the flush tank.

I well remember an attempt made some years ago to do entirely without intercepting chamber by simply surrounding the syphon (a Field annular syphon) with a double cylindrical wire screen of both coarse and fine mesh. In less than six months the tiles were entirely choked. The only alternative would seem to be to strain the solids. English sanitary engineers, among them such well-known authorities as Mr. Rogers Field and Mr. Wm. Eassie, prefer a straining chamber. To quote Mr. Field: "The distinguishing feature of this arrangement is that there is no tank or depression for the sewage to collect in, but that the bottom of the chamber is on the same level as the bottom of the drain, so that the liquid sewage passes through the chamber without any obstruction. The interception of the solids is effected by two strainers, which consist of small iron rods fixed in an iron frame, and so arranged as to be movable. The bottom of the chamber is constructed of concrete, smoothly cemented and rounded, so as to form a sort of channel for the passage of the liquid, and to enable the solids to be more readily cleaned out. This bottom also has a rapid fall from the inlet to the outlet, which still further facilitates the rapid passage of the liquid. The sides are usually formed of brickwork, and the whole is covered by a light wooden lid, opening on a hinge." With such an arrangement a man can easily remove the solids by scraping them up by means of a hoe

over the edge and mixing them with dry earth. To prevent such a chamber from becoming offensive, the solids should be removed daily.

A different arrangement from the above, which has also been repeatedly suggested, is that of having in a straining chamber a perforated pail or movable iron basket, which intercepts all the solids and which must be emptied and cleaned every day.

Of the two devices, the plain strainer appears to me to be far preferable. Personally, I have not yet tried either of the arrangements described. I should be willing to substitute the straining chamber for the intercepting chamber if I could rely explicitly upon *daily* removal.* The trouble involved is not large, it is true, but servants are proverbially neglectful, and the arrangement suggested certainly robs the system of one of its best features, namely, that of being automatic. If daily attendance is required, it might be just as well to require the help to empty the sewage tank daily by opening a stop-valve, and thus do away with every kind of automatic syphon or other device, while retaining the features of intermittent discharge, and of a discharge of a large volume suddenly distributed over the whole of the irrigation field.

4. Owners of country residences find an objection to the system in the necessity of frequent emptying of the intercepting chamber just referred to, which, they claim, causes more or less of a nuisance. As an answer to this objection, I would say that of the two evils of cleaning out a large, ordinary open cesspool and the comparatively speaking small intercepting chamber, the latter is far preferable. But in doing so I probably overlook the fact that the same people who raise such an objection would probably never see to it that their large cesspool is cleaned, paying no attention to it as long as the sewage runs off, no matter where to.

5. It is sometimes objected that the tiles will choke and must be taken up and relaid. I cannot deny the possibility of such an occurrence, although this may only become necessary about every three years on the average. They will choke sooner if they lack the cleansing effect of a flush delivered at intervals from the sewage tank. Even supposing for a moment that the tiles would have to be cleaned and relaid every year, how little amount of labor, trouble and expense is involved in doing so, owing to their being laid in permanent gutters and close to the surface. Compare this with the trouble and annoyance of having to empty and clean a disgusting overflowing cesspool!

6. The system is objected to because the ground where the tiles are buried cannot be plowed, nor can heavy wagons drive over it without risk of breaking or displacing the pipes. This objection cannot be denied, but it is a slight one, if one at all.

7. Many people object to the cost of the automatic syphon. However expensive this may be, it cannot be considered a valid and sound objection against the system. As a matter of fact, the annular syphon, at least in the case of isolated suburban and country houses, does not cost very much. But, where this expense is objected to, the mistake should not be made of providing only one large overflow pipe from the liquid sewage tank, from which a constant small stream dribbles toward the irrigation field. This is a very imperfect and faulty arrangement. Only a short length of the tiles would receive an almost constant trickling flow of sewage, saturating the ground around it to the surface and keeping it in an unwholesome condition. Moreover, the tiles would rapidly choke up with such an arrangement. Aeration, intermittent action, oxidation, powerful flushing, the uniform and entire filling of the tiles, all these conditions essential to the success of the system, would be absent.

As indicated heretofore, a stop-valve in the outlet pipe, worked by hand, may take the place of an automatic syphon. The only other admissible arrangement, and one which I have adopted with perfect success, for smaller country houses, where the owners objected to the cost of an automatic flush tank, is a sewage tank, provided with a large number of overflow pipes, all placed exactly *at the same level* in the tank—not a very easy thing to do, by the way—and all discharging simultaneously equal or nearly equal portions of the sewage into the various lines of absorption drains, thus securing a better distribution of the sewage. In this arrangement the tiles are likely to choke sooner than in the system with intermittent flush tank, since they lack the cleansing effect of a sudden rush of water from the tank.

8. Another objection is the cost of the system. The first expense is, of course, more than that for a cesspool of moderate dimensions, but the frequently recurring expense of cleaning and emptying the latter, soon renders the subsurface irrigation system cheaper than the ordinary cesspool. For a small country house its whole expense should not exceed \$250, and for a larger country residence the system ought not to cost more than \$500, which prices include the royalty on some of the better class of patented automatic flush tanks.

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*Since writing the above the author has constructed such a straining chamber in connection with a 30,000 gallon flush tank for sewage disposal at the State Homeopathic Asylum for the Insane, at Middletown, Orange county, New York.

9. It is sometimes stated that the subsurface irrigation system is impracticable in the case of level ground, or where the lawn rises at the rear of the house, or where the main soilpipe leaves the house at a depth below the cellar floor. To this I answer that some concessions must, under such circumstances, be made. For instance, in places where the available fall from the house to the irrigation field is slight, no plumbing fixtures should be placed in the basement, and the soilpipe should leave the house as near the surface as practicable. In some cases it may even become necessary to build the flush tank in embankment, hiding it in a sort of artificial terrace at the side of the house. By making the tank of a shallow depth it is usually possible to effect a suitable arrangement. In extreme cases it may become necessary to lift the sewage, after straining, and this may be accomplished by a variety of mechanical devices. Where a small air compressor may be operated in the cellar of the house, Shone's sewage ejector appears to offer a simple solution of the problem. Where steam is available, a pulsometer pump could be used for lifting the sewage. If gas is laid on to the house, or a gasoline gas machine is in operation, a gas engine or hot air engine may prove economical. Finally, the motive force of the wind may be used for such purpose by erecting a windmill with suitable pumping apparatus. Whatever the special difficulties may be in each case they can usually be overcome at a slight sacrifice. Certainly they should not be considered objections to the system as such.

10. The objection that the subsurface irrigation system poisons the wells, may be removed by simply locating the field away from wells, or where it must necessarily be close to a house, by abolishing wells, and depending on rainwater collected in tight, underground cisterns, as a source of water supply.

11. Some think that it is impossible to purify sewage by turning it into agricultural drains located at a depth below the roots of the plants. It is hardly worth while to consider this objection, as many years of successful working of the system seem to amply contradict it.

12. The system has received condemnation because "sub-irrigation is a process faulty in principle, as it feeds vegetation by the upward rising of moisture, accompanied by evaporation, with all the chilling influences which are so injurious to vegetation as well as to human beings." I can only answer that, so far as my personal observation goes, practically no harm has ever been done to vegetation; on the contrary, it stimulates the growth of grass, of shrubbery and of fruit trees, which statement, I am confident, is borne out by the experience of other sanitary engineers.

13. Where the irrigation field is underdrained, it frequently happens that at first the sewage leaks away too quickly and without being purified, at the points where the distribution tiles cross the lines of agricultural tiles. This can be remedied after a while, when the earth in the deep trenches for the land tiles settles down and solidifies.

This, I believe, comprises all the criticisms raised against the subsurface irrigation system. While I do not wish to be understood as claiming this method of sewage disposal as a panacea for all the evils incident to country house drainage, I hold that the system is an excellent one wherever suitable land, of suitable character and of sufficient area, properly located, may be obtained. For a further detailed discussion of the whole subject I may be permitted to refer to a small volume, soon to be issued, entitled "The Disposal of Household Wastes."

Interior Decoration.*

BY F. L. LINDEN.

BY the term decoration, as applied to our modern interiors, we generally understand the entire furnishing, woodwork, furniture, carpets, hangings and the color and ornamental treatment of walls and ceilings. As I suppose was intended, I shall confine myself entirely to the latter, as so much has been, and is being written on this subject from an æsthetic point of view.

This decoration is done in various ways, in oil color, distemper color and by the use of tapestries, wall papers and applied relief ornamentation of different kinds. These have their merits or demerits, as regards cost, durability, and artistic value. For instance, the original cost of work done in oil, while being greater than distemper color, is much more durable and frequently cheaper, in the end; while, perhaps, the liability of the plaster cracking precludes the idea of permanent work, and therein distemper color has its advantages.

Tapestries and relief ornamentation are very good and durable, but can only be used in the more expensive class of work. Papers have cheapness to commend them, and some of them are of very beautiful coloring and design, hence quite elaborate effects can be produced by them at a limited cost, but the almost unlimited production of wall papers tends to make even these few, too common. Yet, again, paper can be used on plaster which is too poor to admit of anything else. Much of the disfavor in which distemper color is held on account of its liability to chip or peel off is due to the poor plaster.

This plaster question is one which is not given due consideration, it being supposed that anything will do, as it is to be decorated. Plaster, generally, is of a very poor quality, being too soft and containing too much lime. If work is to be done in distemper color it is impossible to do it on

this soft and chalky surface without first giving it a coat of size, of some sort, to prevent suction. This always is of some quick drying material such as hard oil, or alum size, which forms a thin coating on the surface only.

When, therefore, a coat of strongly glued color (in case it should require ornamentation) is applied on this size, it is liable, when acted upon by heat and dampness, to warp. Owing to the softness of the plaster, and the slight hold of this quick, drying size, it peels off with as much of the plaster as it has penetrated. This would not be the case if the foundation was a hard sand finish, as it is in itself firm and would not require sizing. When this soft plaster is to be decorated in oil, the first coat should be very thin and slow drying, to allow it plenty of time to penetrate, and thereby strengthen the plaster; a second coat should not be applied for several days.

A few years ago nothing was considered more beautiful than white plaster without decoration. Then, of course, sand finish would hardly answer the purpose, on account of the color; but now, when nothing is left white, it certainly is to be preferred. I presume one reason why painters say nothing of this is, that they think it is none of their business, or, they do not care to kill the goose that lays the golden egg. But, I think, if we could get a better foundation, all work would be of a less temporary nature, consequently of better quality.

Recently a decoration for walls has been used very often called "scratch work" or "combed work." The surface is painted with a very heavy coating of composition, and, while soft, is combed into some design and afterward colored. The objection to this is, that it is a permanent decoration; once done, it cannot be changed except in color, hence it should be done very carefully and in a studied design, which will look well when the scheme is no longer odd. But this is something rarely thought of in the use of this material, being generally used in some haphazard way, when the designer is short of ideas. Many houses have been plastered over with this stuff from top to bottom, which cannot be redecorated without great trouble, in some cases, even to the tearing off the last coat of plaster, or, burning off with acids or burners at the great risk of completely ruining the woodwork.

Some very good effects can be produced by the use of relief ornament of different kinds. The cheapest of these is lincrusta walton, but the objection to this, for fine work, is the limited number of designs, and its wholesale use. Papier-maché, so called, as manufactured here, does well enough for temporary decoration, which does not require close inspection, as the designs are necessarily crudely modeled; besides being liable to warp, as glue is used in its manufacture. There is another article, made in Germany, which is better, but the designs are not exactly what we need in this country, being principally German Renaissance, and the process of manufacture is too expensive to allow of special designs. Nothing can surpass the cast plaster ornament, being sharper, and allowing of slight undercut effects impossible in any other material used. By using a mixture of plaster of paris, paper pulp and hemp or tow, this makes comparatively the best relief ornament, being light, strong, clear-cut, and not affected by heat or dampness.

Tapestries for wall decoration can be used with success. They should invariably be hung flat, as under any circumstances they are likely to accumulate dust. They should not be used in any room where they are liable to affect acoustic properties, especially the music room. They have the best effect when used in combination with much woodwork, say in the library, where the wainscoting, bookcases, and, probably, wood ceiling, would leave but little surface. It is advisable not to hang them in dining rooms, as in time they would absorb the odors of the good dinners served there, and prove a reminder of the kitchen. Halls, as a rule, are too large, and odd in shape, to allow of covering the entire surface with tapestry. If used here, they should be hung in such a manner as to be easily removed for cleaning and airing. In chambers, they should never be thought of. Tapestry for the hall and library should be heavy, to harmonize with the woodwork; but for the parlor, which is generally treated in a lighter style, they should be of silk, principally, or some other light material.

In planning a color scheme for a house care should be taken not only to have the colors in each room in harmony, but to have all rooms in harmony with each other. Rooms having a north light should be treated in rich warm colors, and in case the rooms are not well lighted, light colors having yellow or red as a basis. The hall should always be warm and subdued in color, which will give it a cheerful and hospitable appearance. Cold colors should never be used in the hall unless it has a south light and plenty of it, and the woodwork is of some rich wood, such as mahogany, which may need a contrasting color to bring out its beauty. Even then if there is much wall surface a warm color might be preferable. The parlor should be treated in rather a delicate and graceful manner in both color and design; the woodwork generally being of some light wood, such as maple or satinwood. The chief aim in the library is to get a quiet and subdued effect, which will suggest repose. The designs should not be very pronounced. Avoid portraits and use emblematic subjects sparingly, if at all. The dining room may be kept brighter, and richer in both color and design. The decorator should try to make this room cheerful above all others. The walls may be hung with leather. Don't ornament the walls with pictures of dead fish and birds and turn this room into a morgue. Many of our recently built houses have rooms which are very unsymmetrical in form, which allows of very beautiful effects in arrangement of furniture and hangings. Such rooms should not be decorated in such a way as to bring out the plan decidedly on the ceiling; have the dividing line between ceiling and wall, not too high above the eye.

In selecting motives for decorative details it would be well to avoid all animated nature and architectural effects, for although some of the most celebrated frescoes in existence, painted by the Old Masters, are after such designs, yet it is doubtful if some entirely conventional treatment might not have been better, and it is probable that the same artists, if living today, were to redecorate for the sole purpose of adding to the beauty of the architecture, would avoid pictorial subjects, excepting in such places as were especially planned to receive them where they resolve themselves into pictures. In those days they served an educational purpose, which is not necessary today, beside, the best patron of art at that time was the

* Paper read before the Chicago Architectural Sketch Club, June 20, 1887.

church, which naturally led the best talent to scriptural work. No matter how beautiful figures may be printed on ceilings, they are out of place there. If used at all in decorative work they should be painted by a capable artist, as this branch alone is a study of a lifetime, and can hardly be expected from the decorative painter who unwisely too often attempts it.

Unless there is some special reason for so doing, no room should be decorated in a slavish copy of style; Egyptian, Greek, Moresque, Indian or Persian, as all furnishing must then be in keeping, and the result is apt to be museum-like. For instance, in some of the more modern styles, such as Gothic, Romanesque, Byzantine and the Renaissance, work can be kept in these without using the objectionable features, such as goblins, dolphins, and grotesques of various kinds, which the medieval artists delighted to crowd into their manuscripts, carvings and decoration.

The Japanese style has been quite fashionable lately, and, by some decorators, highly favored. The coloring of this style for our decorative work, is too kaleidoscopic and lacking in repose, and if imitated in more subdued colors, loses its Japanese feeling at once. Sometimes a nursery might be done in Japanese when a bright, spotty effect is not undesirable.

Sometimes objections are made to the use of the stencil, and we hear the work spoken slightly of as being "only stencil work;" but there really is no difference in the artistic merit of a piece of work whether it is done by stencil or "by hand," as the art lies in getting the color and design, and if done with the stencil it should not detract from its merit. In fact, almost all design which requires repetition can be done better with the stencil than without. One great fault with most of our decorative painters is that they know too little of architecture. Some would even smile if it were hinted that it was necessary to study architecture to know how to paint a wall, as in some of our more modern residences, especially, the decorative painter has only to finish up a scheme which is already suggested by the design and color of woodwork, furniture, tilework, etc., and unless he carries out these same ideas, he is likely to ruin the whole effect.

And for this reason our most successful decorative work is that which is under the supervision of an architect who is himself an artist, for though he may not take an active part in the designing or execution of the work, he confines the painter within a limit which may seem too narrow to him, but which, in the end, proves the wisdom of the course.

It would seem, therefore, that the more the architect understands of decoration, or the more the painter understands of the architecture he is to decorate, the greater the advantage to both, the more sensible, and, consequently, artistic, will be our interior decoration.

The Chicago Manual Training School.

PERHAPS the most noticeable feature of the late session of the National Educational Association, held in Chicago, which was attended by nearly, or quite ten thousand teachers, was the attention given to the subject of manual training, and the indorsement of this style of education by the association. The friends of manual training had struggled in vain for several years to obtain a hearing before the general association; they had asked repeatedly, and without effect, for the indorsement of the association; but this year they obtained both; and manual training must be, and will be, considered by the great mass of teachers in the country.

Foremost among the agencies which have forced the subject of manual training upon the conservative minds which manage the National Association, and has called the attention of the public to this education, is the Chicago Manual Training School, opened in February, 1884, founded and supported by the Commercial Club, of Chicago, which has already contributed nearly \$150,000 to the school.

The school sprang into being, fully equipped for its work. The best men attainable were secured; every similar school in the country was visited and studied by its directors, and the experience of European schools not neglected. Consequently, the Chicago school has been a success from the start, has always had more applicants than it could accommodate, and its graduates (two classes, about fifty in number) are in demand.

While the school is radical it is also conservative, and its founders are far-seeing, cool-headed business men. The hand and eye are trained as the servants of the brain; and brain development is the foundation of the success of the school.

The object of the Commercial Club, in founding and supporting the school has been to do missionary work, to show what can be done in educating the whole boy, not his mental faculties only, but his hands and his eyes as well. This missionary work has been a marked feature in the history of the school; the seed sown has ripened, in many places, in manual training schools sprung from and modeled after the Chicago school. The number of school principals, superintendents, state commissioners of education, members of school boards, and philanthropic citizens interested in improving and extending the education of youth, who have visited the school, is simply astonishing; while the inquiries by mail, "What are you doing, and how do you do it?" have been sufficiently numerous and exacting to demand the employment of a clerk. The Commercial Club has reason to be abundantly satisfied with its investment.

A brief account of the closing exercises of the school will convey an idea of the work done.

The graduating exercises proper were held June 23, when eight members of the graduating class read essays as follows:

1. Diversity of Industries. Winthrop K. Howe.
2. Illinois. Arthur C. Field.
3. History of Electricity. James V. Rose.
4. The Future of Electricity. Frederick T. Snyder.
5. The Labor Problem. Charles P. Richardson.
6. Railways. Raymond A. Beck.
7. Railway Tunnels. Richard Waterman, Jr.
8. Coal Gas. Walton Forstall.

By far the most interesting part of the closing exercises, however, was the display of shop work and drawing, June 22, when fifteen hundred

invited guests thronged the school building, examining the work of the year, and witnessing the skillful labor of the pupils.

The most elaborate work was found in the machine-shop, where the senior class has worked the past year. Among the articles exhibited were the following:

An eight horsepower steam engine, designed by Frank M. Bennett, assistant engineer U. S. Navy, instructor in charge, the drawings, patterns and finishing all done by the pupils. The castings of this engine were made outside of the school; but a Collian cupola has been constructed for the school, and will be in position in September, so that hereafter everything, including casting in iron, will be done in the school. This engine was running during the exhibit as smoothly as any engine could possibly run. Twelve other steam engines were built by the senior class during the year, including three six horsepower, and one two horsepower oscillating engine. Also, three lathes, a phonograph, etc.

The most noticeable work done in the blacksmith shop was the set of gates for the front entrance to the school, 10 by 7 feet. There was, besides, a large amount of iron and steel work, including lathe tools and blacksmiths' tongs, with which the school is wholly supplied by the boys.

The woodwork comprises a large number of exercises in planing, sawing, dovetailing, turning, etc., and many finished articles, such as carved casels, carved mirror frames of oak, patterns of various kinds, etc.

The drawings, like everything else, showed a decided improvement on preceding years.

Lien Laws of Illinois.

THE CHICAGO BUILDERS' AND TRADERS' EXCHANGE.

A SPECIAL meeting of the Builders' and Traders' Exchange of Chicago was held, July 21, to consider the amended lien laws, which went into effect July 1.

The attorney for the exchange called attention to the law as amended, in a document addressed to the exchange, dated July 1. It reads as follows:

GENTLEMEN,—Two acts were passed by the last legislature, amending and changing the law in relation to mechanics' liens, both of which go into effect on July 1, 1887, and to which I call your attention.

The first was approved May 31, 1887. It amends sections 4 and 28 of the law and adds three sections numbered 52, 53 and 54.

The former section 4 provided merely how and where said suit might be brought. It now reads as follows:

Every creditor or contractor who wishes to avail himself of the provisions of this act shall file with the clerk of the circuit court of the county in which the building, erection, or other improvement to be charged with the lien is situated, a just and true statement or account or demand due him, after allowing all credits, setting forth the time when such material was furnished or labor performed, and containing a correct description of the property to be charged with the lien, and verified by an affidavit. Any person having filed a claim for a lien, as provided in this section may bring a suit at once to enforce the same by bill or petition in any court of competent jurisdiction in the county where the claim for a lien has been filed.

The former section 28 provided that said suit must be brought within six months as against any other creditor, incumbrancer or purchaser. It now reads as follows:

No creditor shall be allowed to enforce a lien created under the provisions of this act, as against or to the prejudice of any other creditor, or incumbrancer, or purchaser, unless a claim for a lien shall have been filed with the clerk of the circuit court, as provided in section 4 of this act, within four months after the last payment shall have become due and payable. Suit shall be commenced within two years after filing such claim with the clerk of the circuit court, or the lien shall be vacated.

Sections 52, 53 and 54 are new and read as follows:

52. Upon the written demand of the owner or his agent, or any person interested in said real estate, served on the person or his agent claiming the lien, requiring suit to be commenced to enforce the lien, such suit shall be commenced within thirty days thereafter or the lien shall be forfeited.

53. The clerk of the circuit court where such lien shall be filed shall indorse on every such claim for a lien filed, the date of filing, and make an abstract thereof in a book kept for that purpose and properly indexed, containing the name of the person filing the lien, the amount of the lien, the date of filing, the name of the person against whom the lien is filed, and a description of the property charged with the lien, and for which the person filing the lien shall pay \$1 to the clerk.

54. Whenever a lien has been claimed by filing the same with the clerk of the circuit court and is afterward paid, the person filing the same shall acknowledge satisfaction thereof in the proper book in such office in writing, and on neglect to do so for ten days after the claim has been paid he shall forfeit to the owner the sum of \$25.

The second act was approved June 16, 1887, and amends sections 29, 30, and 35, and repeals sections 36, 42, 43, and 44. The amended sections now read as follows (the amendments being in quotation marks):

29. Every sub-contractor, mechanic, workman, or other person who shall hereafter, in pursuance of the purposes of the original contract between the owner of any lot or piece of ground, or his agent and the original contractor, perform any labor or furnish any materials in building, altering, repairing, beautifying or ornamenting any house or other building or appurtenance thereto, on such lot or on any street or alley, and connected with such building or appurtenance, shall have a lien for the value of such labor and materials upon such house or building and appurtenances, and upon the lot or land upon which the same stands, to the extent of the right,

title and interest of such owner at the time of making the original contract for such house or the improvement, but the aggregate of all the liens hereby authorized shall not exceed the price stipulated in the original contract between such owner and the original contractor for such improvements. In no case shall the owner be compelled to pay a greater sum for or on account of such house, building or other improvements than the price or sum stipulated in said original contract or agreement, "unless payments be made to the original contractors or to his order, in violation of the rights and interests of the persons intended to be benefited by section 35 of this act;" provided, if it shall appear to the court that the owner and contractor fraudulently, and for the purpose of defrauding sub-contractors, fixed an unreasonably low price in their original contract for the erection or repairing of such building, then the court shall ascertain how much of a difference exists between a fair price for the labor and material used in said building or other improvements and the sum named in said original contract. Said difference shall be considered a part of the contract, and be subject to a lien, but in no case shall the original contractor's time or profits be secured by this means only so far as the sum named in the original contract or agreement.

30. The person performing such labor, or furnishing such material, shall cause a notice in writing to be served on such owner or his agent substantially in the following form:

To..... You are hereby notified that I have been employed by..... to (here state whether to labor or furnish material and substantially the nature of the undertaking or demand) upon your (here state the building and where situated in general terms) and that I shall hold the (building or as the case may be) and your interest in the grounds liable for the amount that (is or may become) due me on account thereof. Date..... Signature..... "provided such notice shall not be necessary where the sworn statement of the contractor provided for in section 35 of this act, shall serve to give the owner true notice of the amount due, and to whom due."

35. "The original contractor shall, whenever any payment of money shall become due from the owner, or whenever he desires to draw any money from the owner, lessee or his agent, on such contract," make out and give to the owner, lessee or his agent, "a statement under oath," of the number, and name of every sub-contractor, mechanics or workmen in his employ, or persons furnishing materials, giving their names, and the rate of wages or the terms of contract, and how much, if anything, is due "or to become due" to them or any of them "for work done or materials furnished, and the owner, lessee or his agent shall retain out of any money then due, or to become due to the contractor, an amount sufficient to pay all demands that are due or to become due such sub-contractors, mechanics and workmen or persons furnishing material, as shown by the contractor's statement, and pay the same to them according to their respective rights, and all payments so made shall, as between such owner and contractor, be considered the same as if paid to such original contractor. "Until the statement provided for in this section is made in manner and form as herein provided, the contractor shall have no right of action or lien against the owner on account of such contract, and any payment made by the owner before such statement is made, or without retaining sufficient money if that amount be due, or is to become due, to pay the sub-contractors, mechanics, workmen or persons furnishing materials, as shown by the statement, shall be considered illegal, and made in violation of the rights of the persons intended to be benefited by this act, and the rights of such sub-contractors, mechanics, workmen or persons furnishing material to a lien shall not be affected thereby. In order that the owner, lessee or his agent may be protected, he may at any time during the progress of the work, demand in writing of the contractor a statement herein provided for, which shall be made by the contractor and given to the owner, lessee or his agent, and if such contractor fail to furnish such statement within five days after demand made, he shall forfeit to such owner the sum of fifty dollars (\$50) for every such offense, which may be recovered in any action of debt before any justice of the peace."

The section 36 repealed by said act is embodied in the said new section 35.

The sections 42, 43 and 44, also repealed, provided for a bond to be given by the original contractor to the owner, for the use of the sub-contractors to release sub-contractors' liens, and proceedings under such bond.

No such proceeding is provided for in the law as it now stands.

Very truly yours,

EUGENE E. PRUSSING,

Attorney for the Builders' and Traders' Exchange.

Eugene E. Prussing, the attorney for the exchange, thought the law liable to work a hardship upon the contractor of small resources. The law aided the owner to get a lien without great expense. It was essentially a material-man's law, and not in the interest of the mechanic or workman. "If the law is constitutional," says Mr. Prussing, "it guarantees perfect protection to the material-men. The owner, however, if he does not protect himself, may be required to pay for his building twice over. The poor but honest contractor may have to suffer. He will be required to pay cash or squander his money in making sworn statements. The owner may be obliged to pay the contractor and then build the structure himself."

D. V. Purington thought the law would have a tendency to induce owners to let their contracts to responsible men.

"Suppose I sign a contract and give bonds," asked Mr. Downey, "am I required to furnish sworn statements to the owners?" He was answered in the affirmative. Mr. Downey thought the law would tend to drive all poor contractors out of business.

Mr. McKenna, a leading brick manufacturer, thought the law was a first-class one. The honest contractor would never know the law was in operation. In the past irresponsible contractors had taken the work so low that reputable men could not touch it. Mr. A. Corcoran was bitterly opposed to the law, which, in his opinion, was passed for the purpose of

giving a few men a complete monopoly of the building business. "It is a law for capital and capitalists," said he, "and does not recognize a man's honesty or reputation. If he has not a big bank account he must quit business."

Architect D. H. Burnham, among other things, said: "If this law is enforced, as I am sure it will be, a revolution will take place in the building trade of Chicago. The architect will in the future be obliged to have facilities he never dreamed of before. His office must contain a man capable of figuring mason work better than the average mason, a carpenter superior to the average contracting carpenter, and the same with all the various trades connected with the building interest. Suppose the architect makes an arrangement to pay the contractors every two weeks. That means that he must know the exact financial situation of each contractor, the amount of material on hand and contracted for, the number of men employed and wages due, and a score of other details. This requires the architect to employ a large force of clerks and makes his office an accounting institution. The cost of building will be greatly increased, and the number of architects will be greatly diminished. There are few architects in the city capable of swinging such a business. From this there is but one method of escape. The architect must select none but responsible contractors. What is a responsible contractor? An honest contractor? No. A contractor who does a large business? Not at all. It means a contractor with a bank account large enough to erect a building from beginning to completion without calling upon the owner for a cent. It means a man whom the First National Bank will vouch for. If an irresponsible contractor has bad luck, makes a mistake, or meets with an accident, the loss falls upon the owner. The owner will not take the risk. I know it, for they have told me so. The first thing the owner will ask is, 'Has this contractor any property I can levy upon?' The enforcement of this law will ruin the building trade of Chicago. The legislature should be reconvened this fall and forced to repeal it."

Mr. George C. Prussing did not take such a bad view of the law and its probable operation. He thought the reputable contractor would have no difficulty in persuading the material-men to waive their rights under the law. Mr. J. G. McCarthy said that they were organized to protect the rights of the builders and traders. The new law was a good one for money sharks and large owners of property. He agreed with Mr. Burnham's views, and predicted that the strict enforcement of the law would wipe out all small contractors. After several speeches of a similar purport the meeting adjourned.

Several of the contractors are of the opinion that the law will result in the letting of the majority of the work now in contemplation upon the percentage system. By that plan the owner assumes all risks, and pays the contractor a percentage upon the original amount of the contract.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS.

A special meeting of the Illinois State Association was called by the executive committee to consider the proper interpretation of, and future action in regard to the amended lien law.

After disposing of other matters, copies of the amendments to the lien law, published by the Builders and Traders' Exchange, were distributed.

Among the prominent members of the association present were J. J. Flanders, Alfred Smith, Clarence L. Stiles, Fritz Foltz, W. W. Clay, Dankmar Adler, W. W. Boyington, D. H. Burnham, Frederick Baumann, O. J. Pierce, Mr. Schaub, Wm. Holabird, Normand S. Patton, J. L. Silsby, L. D. Cleveland, Samuel A. Treat, John W. Root, C. M. Palmer.

President Adler: Gentlemen, there was another object for calling this meeting. You are all aware of the existence of a manufacturers' lien law which has been in force since the first of July last, a law which has for its object to protect the owners of buildings against the claims of material men and manufacturers. Some two weeks ago an informal meeting of ten or twelve architects was held, of which Mr. Burnham was the Chairman. The purpose of this meeting was to look into the character of this law, and to endeavor to have an understanding of its intent and meaning. By a resolution, a committee was appointed to obtain a legal opinion of the law, and to have such necessary blanks as were requisite to meet its demands upon architects drafted. The committee conferred with Mr. Ernest E. Prussing, attorney, who has furnished a written opinion, also a number of blank forms that seemed to be demanded. This opinion and the blanks were prepared to present to this association for consideration; that, if it was thought to be advisable, other supplementary opinions and blanks might be added, for the protection of members.

The president then read the following opinion from Ernest E. Prussing, after which he circulated copies of blanks.

CHICAGO, July 26, 1887.

Mr. D. H. Burnham, Chicago:

DEAR SIR,—In compliance with your request I have prepared and submit herewith:

1. A form for contractor's affidavit under section 35 of the lien law. This form may be readily adapted to any special circumstances.

2. A form of architect's certificate. It refers to the foregoing affidavit and should be for the net balance then to be paid to the contractor in view of the statement made in his affidavit, the architect being the judge of how much the contractor is entitled to under the law, or how much it is prudent to pay him in case waivers of liens are filed with the affidavit or when other special circumstances exist.

3. A form of waiver of liens by sub-contractors.

In reply to your inquiries I am of the opinion:

1. The demand for the sworn statement should be made by the owner or some agent for him, upon the contractor, in person, either verbally or by delivery of a writing; not by mail. In case of any difficulty it may be well to also send a demand by mail.

2. The owner, or his agent, is justified by the law in assuming that the sworn statement of the contractor is true, until he has notice in writing, as provided by the law, from the sub-contractor, and thereafter he is bound to inquire of the sub-contractor what his claim is. If this exceeds the sworn statement the owner becomes liable for the excess only to the extent of any surplus in his hands after paying for the work still to be done to complete the contract, just as heretofore under the old law. Of course any knowledge as to the sub-contractor's claims obtained from other sources by the owner or his agent would make it prudent, if not obligatory, to demand an explanation.

3. The expression in section 35, "due or to become due," refers to work done or materials furnished prior to the time of the statement, and not to work or materials contracted for and not yet performed or delivered. Yours truly,

(Signed) EUGENE E. PRUSSING.

The blank forms distributed were, first, a form of affidavit for the use of the contractor, which is as follows:

STATE OF ILLINOIS, }
COUNTY OF COOK, } ss.
.....being duly sworn, deposes and says:
My name is..... I am the contractor for the
..... work on the building erected for.....
on the premises described as Number..... in the
County of Cook and State of Illinois.
I make this affidavit for the purpose of procuring from said.....
a payment on account of my contract with him for said work.
I have contracted with the persons named in the following schedule for the materials
furnished and used by me in the construction of said building, of the kinds and in the
amounts set opposite their respective names, and there is now due and to become due
to them, respectively, on account thereof, the amounts set out in the column marked
"Due and to become due."

SCHEDULE OF MATERIALS.

NAME.	MATERIALS.	DUE AND TO BECOME DUE.	
		Dols.	Cents.

I have in my employ the following named persons, on account of said building, at the rates of wages expressed in the following schedule, and there are now due, and to grow due to them, the sums set opposite their respective names therein:

SCHEDULE OF EMPLOYÉS.

NAMES.	RATE OF WAGES.	DUE AND TO BECOME DUE.	
		Dols.	Cents.

The foregoing is a complete statement of the number, name of every sub-contractor, mechanic and workman in my employ, the names of all persons furnishing materials and the rate of wages and terms of contract, and how much is due and to become due to them for work done and materials furnished on account of the building aforesaid, by, through, or under me.

Subscribed and sworn to before me this.....day of.....188...
.....
Notary Public.

The following is the form of certificate which will be issued until future notice by members of the Illinois State Association of Architects.

CHICAGO, 188...
To.....
This is to certify that there is due.....the sum of.....
dollars, on a contract for.....upon.....
This certificate is issued upon an application and affidavit of the said.....
dated....., 188..., and made in accordance with the provisions of section
35 of the law relating to sub-contractors' liens, in force July 1, 1887.
.....
Architects.

CHICAGO, 188...
To.....
on.....for.....
of.....
Date of affidavit.....

The following form of waiver of lien was presented and accepted by the association.

CHICAGO,.....188...
To all whom it may concern:
For value received, the undersigned waive.. and release.. any and all lien or right
of lien under an act entitled "An act to revise the law relating to liens" and all amend-
ments thereof, on account of labor or materials or both, furnished or to be furnished by
the undersigned to or on account of.....for the building known
as.....

Mr. Baumann: Who got this law up?

The President: Nobody seems to know its father.

Immediately the members resolved themselves into groups, discussing the many intricacies that were suggested by the reading of the opinion of Attorney Prussing, together with the law itself. Members gave their manner of meeting the exigencies that arose between themselves as representatives of their clients and the contractors, which, in all cases, resulted in self-protection, although in most cases to the inconvenience of the contractors.

During the informal discussion, Mr. Root informed the meeting that he had been keeping, from the 1st of July to the 15th, a careful memoranda of the manner proposed by contractors to meet the different cases, raising many points, which he had prepared and given to attorneys for opinions as to their pertinency, of which opinions he proposed to have copies printed and sent around to the members of the association.

President Adler remarked, "this is but an informal discussion of the law. We cannot repeal the law. All we can do is to get the best understanding of its character in all its bearings and then carry it out. We have enough, in the opinion of Mr. Prussing and the submitted blank forms procured by the special committee of the informal meeting of the ten members of this association, to suffice for present purposes, and I suggest that we have these printed and distributed among the members for concert of action; and if it is thought best to have further legal advice, that can, in the meantime, be referred to a special or other committee."

Mr. Burnham: I think, Mr. President, it behooves us to be on the safe side, and I am in favor of getting such other legal advice as we can. Then we will be in a position to judge how far we are held by the law.

Mr. Root: I suppose if we decide to act on the opinion we have, that it will not interfere or prevent us from obtaining other legal advice, and acting on it if it is our wish to do so.

O. J. Pierce: How would it do to instruct the Executive Committee to have them printed and distributed to the members, with the understanding, if they find any reason to feel that other legal advice is necessary to pro-

cure it; or that might be left to the special committee the other day, and this further information could be sent to the members by circular.

Mr. Root: I move the Executive Committee be instructed to that effect. Carried.

President Adler: We might suggest that any member of the association, who should receive legal advice upon any point that arose in his practice, furnish it to the Executive Committee, to be distributed by it to the other members of the association; also, that members give to the committee such points as to them seem to be of special importance.

A member called attention to a form which the Builders and Traders' Exchange had got up, and stated that it had serious defects.

President Adler: We will disregard it, and insist upon using the forms adopted here with all contractors, as we are responsible to the owners.

It was the action of the association to abide by the decision and forms presented through the chair, and to make them the uniform practice of the members.

Other matters pertaining to the law were considered, such as to what might be held under the word "material," etc.; also, suggestions were made as to getting up a test case in order to have the ruling of the Supreme Court upon the law; nothing, however, in this direction was done save the suggestion, and the meeting adjourned.

Association Notes.

WESTERN ASSOCIATION OF ARCHITECTS.—Convention will be held November 16, 1887, at Cincinnati. J. F. Alexander, La Fayette, Ind., secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Convention will be held the first Tuesday in February, 1888, at Cincinnati. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the first Saturday of every month, at 15 East Washington street, Chicago. Annual meeting first Thursday in October, 1887. Clarence L. Stiles, Chicago, secretary.

INDIANA STATE ASSOCIATION OF ARCHITECTS meets on the fourth Wednesdays of January, April, July and October of each year. Annual meeting fourth Wednesday in October. E. H. Ketcham, Indianapolis, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at Kansas City on the second Tuesday in January, 1888. Charles E. Illsley, St. Louis, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of August, 1887, at Spirit Lake. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 3, 1888. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Wichita on the third Tuesday of January, 1888. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting third Thursday in August, 1888, at Cleveland. F. A. Coburn, Cleveland, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets bi-monthly. Annual meeting third Thursday in February, 1888, at Memphis. T. L. Dismukes, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Houston on the third Tuesday of January, 1888. S. A. J. Preston, Austin, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1887. F. B. Hamilton, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October each year. F. M. Ellis, Omaha, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday, Builders' and Traders' Exchange. W. G. Williamson, secretary.

THE WESTERN SOCIETY OF ENGINEERS meets the first and third Tuesdays of each month at 4 o'clock, P. M., at 15 East Washington street, Chicago.

THE ILLINOIS STATE ASSOCIATION OF ARCHITECTS.

A meeting of the Executive Committee of the State Association was held, August 2, to consider the advisability of calling a special meeting of the association. It was decided to call a meeting for August 5 to take action regarding a proper reception of the American Institute of Architects in October, and to discuss the amended lien law of the state. The association assembled August 5, about thirty-five members being present. The association was honored by the presence of George W. Rapp, of Cincinnati, of the Board of Directors of Western Association of Architects, and James F. Alexander, of Lafayette, secretary Western Association of Architects. President Dankmar Adler occupied the chair, and after the discus-

sion of the usual elegant lunch and a superb quality of frozen punch, the meeting was called to order by the chair.

President Adler: Gentlemen, you will please come to order. This is a special meeting of the Association, called, in the first place, to get an expression of opinions from members as to the part the association shall take in the entertainment of the members of the American Institute of Architects, which is to hold its twenty-first annual meeting in this city on the 19th of October next. It has been suggested that something ought to be done by the architects of Chicago in that direction, and I think it is but proper that we should take some steps toward doing our part in making that occasion an agreeable one to the visiting architects. It is for you, gentlemen, to say what shall be done; whether such entertainment shall be given under the auspices and at the expense of this association, or whether it shall be given by the individual members, and the expense defrayed by individual subscription; also, it is for you to determine the character of the entertainment. I think you all feel like making the occasion one of interest, as far as in your power, to the members of the American Institute, an occasion which we may hope to see bring the institute into closer relations with the Western Association, possibly resulting, ultimately, in both associations forming under one organization. What is your wish, gentlemen?

Mr. J. W. Root said: I would like to state that when I, with Mr. McLean, was attending the last annual session of the institute, I took the liberty, on the part of the Chicago architects, to invite the institute to hold its next convention in this city. The invitation was received with great enthusiasm, and I feel that from the manner in which the invitation was accepted, that if we do our part the institute will have a very enthusiastic meeting, which may pave the way to some possible union of the two associations, which will be a benefit to all.

To test the sense of the meeting, Mr. Burnham moved:

Resolved, That it is the sense of the Illinois State Association of Architects that we join with the Chicago Chapter in providing an entertainment for the members of the American Institute of Architects, at its next annual meeting, in this city, and that this association takes great pleasure in extending to them a hearty welcome.

The motion was carried unanimously.

The following informal motion was put by the chair, and carried unanimously:

Resolved, That the Executive Committee be authorized to confer with the officers of the Chicago Chapter of the Institute, and to take such steps in concert with them as in their judgment shall be deemed best to provide a suitable entertainment to the invited guests; and that the amount to be expended by this association be left to the discretion of the Executive Committee.

The members here entered into the consideration of the state lien laws, the report of which will be found under that heading.

BOARD OF DIRECTORS WESTERN ASSOCIATION OF ARCHITECTS.

The meeting of the Board of Directors, called for August 5, to hold a session in Chicago, was attended by President John W. Root, Secretary James F. Alexander, Dankmar Adler, of Chicago, and George W. Rapp, of Cincinnati. The first business that came before the meeting was the reception of applications for membership, each indorsed by two architects.

The following are those received since the last meeting of the board: From Buffalo: Chas. R. Perceval, recommended by W. W. Carlin and Louise Bethune; Jesse R. Porter, recommended by W. W. Carlin and R. A. Bethune; Cyrus K. Porter, recommended by W. W. Carlin and W. W. Boyington; R. A. Bethune, recommended by J. W. Root and Sidney Smith; Henry L. Campbell, recommended by Louise Bethune and W. W. Carlin.

From St. Louis: Ad. Monschein, recommended by L. C. Bulkley and T. B. Annan.

From Lafayette, Indiana: Langdon S. Thompson, teacher of Industrial Art at Purdue University, Lafayette.

From Cleveland, Ohio: T. C. Bate, recommended by G. W. Rapp and F. O. Weary.

From Canton, Ohio: Guy Tilden, recommended by C. H. Owsley and G. W. Rapp; Frank J. Otter, recommended by C. I. Williams and W. R. Forbush; F. J. Barnum, recommended by C. H. Schweinfurth and C. O. Airey; Edwin Buddemeyer, recommended by Chas. Crapsey and G. W. Rapp.

The following with the above is the complete list to date of names received for membership during the year:

Howland Russel, W. A. Holbrook and H. C. Koch, Milwaukee, Wis.; Jno. A. Hascoster, Richmond, Ind.; Eugene T. Heimer, Houston, Texas; Frank J. Grodavent, Leavenworth, Kan.; E. L. Merrill, Des Moines, Iowa; Julian Barnes, Joliet, Ills.; Horatio R. Wilson, P. W. Ruehl and Jno. Otter, Chicago, Ills.; Geo. R. Mann, St. Joseph, Mo.; W. W. Lamont, Waco, Texas.

In regard to the work of obtaining information upon the introduction and working of the metrical system in Germany, Mr. Adler said he had prepared a letter to be sent to architectural and technical authorities through the United States Consuls at different German cities. The letter asks for the following information:

First. The extent and nature of the preliminary instruction in public schools, colleges and seminaries. The opportunities given to mechanics, merchants, clerks and adults out of school to acquire the necessary knowledge, in order to use the system intelligently.

Second. The condition in the earlier days of the adoption of the system as to the confusion that arose from its use.

Third. Whether the final result has been satisfactory to the people, that is, whether it has been found worth the trouble it occasioned.

Section 4 of the constitution relating to honorary membership was discussed, and it was decided to recommend a change, allowing fellows of the association to become honorary members upon resigning practice after ten years instead of three years' honorable active membership, and that professors of architecture in colleges and universities in states where the association has ten or more members, shall be honorary members *ex-officio*. It will also be recommended by the board that honorary members be allowed to participate in the discussions at conventions, and be given the right to vote upon all questions except those involving the outlay of

money, but they shall not be eligible to office or subject to dues or initiation fees.

It was decided to recommend that the Board of Directors consist of five members as now, but that the president shall be *ex-officio* one of the five. John W. Root, Dankmar Adler and J. F. Alexander were appointed by the board to represent the Western Association at the coming convention of the American Institute.

A letter received from Mr. P. B. Wight, referring to a desire on the part of the National Association of Builders to confer with the Western Association of Architects on the subject of uniform contracts, was read and referred to J. F. Alexander, who is chairman of the Western Association Committee on Uniform Contracts and Specifications.

The secretary desired members to be notified that those who have matters of interest to present to the coming convention to have all papers in hands of the secretary on or before October 15. The secretary also requests the secretaries of all state associations to send annual reports to him before that date, to be incorporated in his report.

After a general discussion regarding programme for the convention the board adjourned to meet in Chicago, October 19.

The following circular has been issued by the secretary, directed to members of the association:

WESTERN ASSOCIATION OF ARCHITECTS, }
SECRETARY'S OFFICE, LAFAYETTE, INDIANA. }

The next convention of the Western Association of Architects will be held in Cincinnati, on Wednesday, November 16.

This convention is of peculiar importance. It marks a point in the growth of the association when first enthusiasms have passed, and when more enduring interests should be awakening.

It is therefore hoped that the convention will not only be largely attended, but that each member will before coming give careful thought to the work which the association should accomplish, and will add to the general good all that can be accomplished by his personal energy and zeal.

To augment the interest of the convention, it is intended that the exhibitions of drawings, photographs, etc., of buildings, designed by members shall be unusually full, and invitations have been issued to members of the American Institute for similar contributions from its members.

The illustrations to be sent embrace any form of drawing, photograph or print which exhibit buildings or parts of them, executed at any time during the last ten years.

Illustrations of work not actually executed will not be received. Your cooperation in this direction is earnestly solicited. The association will defray costs of shipping, express and boxing.

In the list of standing committees will be found the names of the committee having the matter especially in hand.

JOHN W. ROOT, President,
115 Monroe street, Chicago, Ill.
D. ADLER, Chairman Board of Directors,
58 Borden block, Chicago, Ill.
J. F. ALEXANDER, Secretary,
Corner Fourth & Main streets, Lafayette, Ind.

THE BUILDERS' EXCHANGE OF CLEVELAND.

At the meeting of the Builders' Exchange in the Board of Trade rooms, July 23, the president, Colonel McAllister, presided. A set of by-laws and regulations were adopted. Under these rules any mechanic or dealer connected with the building trades may become a member of the exchange by receiving the votes of eight directors, and purchasing one share of stock in the company. The financial business of the exchange will be conducted by a board of fifteen directors, elected annually. The board will meet monthly, and will provide a room to be opened at certain hours every day to the members of the exchange for the transaction of business. The room will be open at all hours for members, but the meeting hour will be from 11 to 12 o'clock in the morning. The annual meeting will be held on the first Wednesday in January and the meetings for nominating officers on the second Wednesday in November, but special meetings may be called when deemed necessary by the directors, three days' notice being given the members. The annual assessment is placed at \$10, but special assessments to make up deficiencies may be levied. No person or firm will be permitted to hold more than \$100 worth of stock in the exchange. All cases in dispute between members must be heard by a standing committee on arbitration, consisting of five members, but an appeal may be made from the decision to the committee on appeal for final hearing. A meeting of the directors was announced for next Saturday, and an adjournment was taken, subject to the call of that board.

CHICAGO ARCHITECTURAL SKETCH CLUB.

John K. Allen, managing editor of the *Sanitary News*, of Chicago, is preparing another lecture and series of the superb stereopticon views, which delighted the sketch club some time since, which will occupy an evening with the club in the near future. Mr. Allen has collected a large number of most valuable architectural views, and his placing them in this way at the disposal of the club, is deserving of the highest commendation.

At the regular meeting, August 15, O. C. Christian will deliver his paper on "Comparison of Ancient and Modern Architecture."

SAMUEL J. TOMPKINS, treasurer of the A. A. Griffing Iron Works, is receiving competitive plans for a residence for himself. Information may be obtained by applying to Mr. Tompkins.

THE new illustrated catalogue of the Bundy Radiators for 1886-87, recently received from the A. A. Griffing Iron Company, is elegant and artistic in its appearance, and is admirably illustrated with numerous cuts of the Bundy steam and hot water radiators and their appliances; also the Thomson patent radiator, of which they are the sole manufacturers. The frontispiece presents a view of the A. A. Griffing Iron Company's extensive works at Jersey City. This catalogue contains, besides the illustrations, ample price lists and all information required by interested parties. It also contains a number of fac-simile letters from customers who have used their goods, and some twenty-four pages are devoted to printed references, well classified, which list shows their goods to have been used not only in almost every state and territory in this country, but also in England, Scotland, Canada and British Columbia; also that they have been, and are used in some of the most noted buildings, both public and private in the United States and foreign countries. The catalogue gives six illustrations of their elegant radiator covers or screens, which they furnish in either antique or polished brass, in beautiful and artistic designs.

Fourth Semi-Annual Meeting of Association Ohio Architects.

THE fourth semi-annual meeting of the Association Ohio Architects assembled at the parlors of the Weddell House, Cleveland, Ohio, July 21, 1887. The convention was addressed by President C. F. Schweinfurth, as follows:

"In behalf of the architects of Cleveland, and with the fraternal regard of members of the profession, I wish to welcome you to our city, to welcome you as men as well as architects.

"When, last January, yielding to the request of several of our associates, I journeyed to Cincinnati and joined you in the third semi-annual meeting, you conferred upon me the honor of electing me your president for this year. Owing to my surprise and embarrassment I neglected to express my thanks to you. I do so now, and again with the resident members of the association, welcome you to this city, and trust you will find benefit and pleasure and good among us.

"We have no 'permanent exhibit,' 'art gallery,' 'building law,' 'inspector of buildings,' or 'Cleveland chapter of the Western Association.' We have a future, however. There are a few among us who can look beyond the percentage on the investment, and whose aim is not the greed of the accumulator. We prefer the cultivation and advancement of the art and the courtesy of the art.

"It was the expression of my predecessor, that he wished a society of architects could be formed in Cleveland, and he impressed on me the desirability, nay, the necessity of a Cleveland chapter. Alas! He knew not the climate. The effort to form a chapter has failed, not that it would not be a benefit, but, there are those who prefer not to be hampered by the restrictions of any association or the burden of the heavy weights of this association. 'The Cleveland chapter' of the association is a failure.

"Our city has taken quite a lead the past few years, and it is now our privilege to welcome you, to thank you for the honor conferred on us and to show you our city, and although, as I have before remarked, we have no art galleries, we have iron mills, the viaduct, the Brush electric light, and several examples of good and of bad architecture. We are in hopes that the near future will bring us art galleries, enterprises, monuments, public benefactions, and all those associations so needful to soothe and enthuse, and stimulate progress and insure a safe and creditable standing with our sister cities. We look for this progress and the formation of a Cleveland chapter as a powerful ally of the great Western Association of Architects. We must not forget the great cause, and that we are the disciples of that great cause. We must forget the personality, and labor together for the good, the future of architecture.

"We meet to have a social midsummer reunion, and to consider several important features necessary to our success, and I suggest we give each item careful thought, and especially the features relating to licensing architects, the building law, and the coming general convention of the Western Association.

"After the business of the meeting is over, we hope to show you the beauties of Cleveland, and at 8:30 P.M. wish to meet you at the Stillman Hotel in executive session."

The roll was called and the following is a full list of the members at this date:

Akron: Geo. Kramer,* F. O. Weary.* Canton: Guy Tilden.* Chillicothe: Chas. B. Cook, J. F. Cook. Cincinnati: W. M. Aiken, Edwin Anderson, Wm. R. Brown, Edwin Buddemeyer, Chas. Crapsey,* S. E. Des Jardins, Gustave Drach, Walter R. Forbush,* W. W. Franklin, L. Green, Geo. W. Rapp,* E. G. Reuckert,* T. E. Richter, G. H. Martzel, C. A. Stribling. Dayton: S. R. Burns, Frank J. Otter, Luther Peters, C. I. Williams.* Hamilton: M. Reutte. Tiffin: T. K. Hewitt. Toledo: N. B. Bacon, Bernard Becker, E. O. Fallis,* D. S. Stein. Youngstown: L. Boucherle, W. B. Ellis,* A. Kanengeiser,* Herman Kling, C. H. Owsley.* Zanesville: H. C. Lindsay,* D. S. Schureman, H. E. Siter. Cleveland: C. O. Arey,* F. C. Bate,* F. S. Barnum,* F. A. Coburn,* F. E. Cudell,* John Eisenmann, J. N. Richardson,* Edward Schwabe, C. F. Schweinfurth,* A. M. Smith. Columbus: J. M. Freeze,* S. J. Hall, J. S. Harris, E. W. Hart, J. A. Kremer,* H. A. Linthwaite, J. W. Yost.* Chicago: Honorary member, R. C. McLean.*

The architectural press was represented by H. L. Gay, of the *Building Budget* and R. C. McLean, of *THE INLAND ARCHITECT*.

The Executive Committee reported the election of the following to membership in the association: L. Boucherle, Youngstown; Frank J. Otter, Dayton; D. L. Stein, Toledo; Wm. R. Brown, Cincinnati; A. M. Smith, John Eisenmann, Edward Schwabe, Cleveland.

The president announced an intermission of a few minutes, during which members could pay their dues.

After the meeting was again called to order, the treasurer reported about \$280 in the treasury, and \$20 due from Cincinnati which could be counted upon. There was a resolution passed at the January meeting that such members as had not paid could have six months to pay it in.

There was some discussion, during which the action of the officers in dropping from the roll the names of those who had not paid their dues was approved of.

The report of the treasurer was accepted.

A communication was received from the Cleveland Stone Company, inviting members of the association to visit the quarries at Amherst and Berea. It was received with a resolution of thanks, but owing to a lack of time it was decided that the members could not go as a body.

The matter of S. J. Hall, member from Columbus, who was reported as having been doing contract work was brought up and referred to the Executive Committee.

Mr. Yost, chairman of the Committee on Statutory Revision and the Law for Licensing Architects reported no progress of a definite character. The fight was being kept up with a kind of running fire. It was before the legislature last year and will be brought up before the next legislature.

*Members present at this meeting.

The Committee on the Formation of Chapters reported no new chapters. From Cincinnati, Mr. Rapp reported: "There are now nineteen members, several members having left the city. The chapter meets monthly and on special occasions. Efforts have been made to have the coming competitions for city hall and armory conducted according to the schedule adopted by the Western Association, without success so far, though the time has been extended. Arrangements are made for the entertainment of the Western Association next November, and efforts will be made to make the visit agreeable to all."

Mr. Fallis, of Toledo, reported the prospect for the formation of a chapter in a few months.

Members from the other cities could report no progress.

The following letter from John W. Root, president of the Western Association of Architects, was handed the president by Mr. McLean, who stated that it had been Mr. Root's intention to be present at the meeting, but unavoidable business had detained him.

CHICAGO, ILL., July 20, 1887.

C. F. Schweinfurth, President Ohio Association of Architects:

DEAR SIR,—It is a serious and extreme regret to me that I am not able to attend the annual meeting of your association in Cleveland. I have been in correspondence for some time with a number of your members and am very much interested in the status of the Association, not only for its own good, but for the good of the Western Association as well.

The various unions of architects which have within a short time sprung up throughout the West are very significant and should be productive of great good.

Each one of us must frankly confess that in the newer states, even more than in the older eastern states, the conditions of architectural practice will be, and must for some time remain, very crude. With us the conditions are so rapidly changing that the architect can scarcely hope for the recognition accorded to him in older and more firmly established communities. Under the most favorable circumstances the architect can compel this recognition, but in an association formed in any part of the country, and more especially in the West, there will be numerous instances in which exceptions from any recognized code of practice will be almost necessary. Indeed, if all conditions were so firmly established that the architect would be everywhere equally well considered, the necessity for any association would be done away with.

Your association, therefore, like the more comprehensive Western Association, is based upon full recognition of all limitations in the architect personally, and in the conditions about him. Its object is to put the highest possible premium upon uniform action among architects, to give the highest possible incentive and moral support to dignify professional conduct, and as much as possible to discourage conduct tending to the injury of individuals in the profession and the profession at large.

I do not conceive it to be within the province of either the Ohio or Western Associations to visit penalties upon men whose sole violation of what we conceive to be professional ethics is charging reduced commissions. While as associations we may be agreed upon the advisability of uniform commissions as tending most clearly to establish the professional status of architects, yet we cannot too closely inquire into the personal conduct of every man's business, providing only that what we may do is not a source of direct injury to some other member of the association. Our function is to regulate the relationships between the various members themselves, and between the corporate body of members and the public at large.

You will, I am sure, agree with me that it is a misfortune both to your association and to the Western Association as well, if architects are restrained by personal feelings from giving to them their full cooperation and help.

Probably in any large town, where there are a number of architects in practice, no one man will find a quarter of their number with whose methods or practice he is entirely in accord. So much the more reason, therefore, that he should give to an association of these men his best service, thus helping to lift the profession of which he is a member to a higher and more dignified plane. It is to impress upon the gentlemen of your association this single fact that I have taken the liberty of writing this letter.

I am not, of course, so intimately acquainted with the condition of things in Ohio as in Illinois, but I assume them to be practically the same, and I find in our own association that many men are made lukewarm in their attachment, or else fail to attach themselves at all because of their disapproval of certain members belonging to it. This, I think, is altogether to be lamented. The work of the association is cumulative, and if it accomplishes its purpose either through the union of all the associations or through the state associations themselves it must be through long and continued effort, each point gained being tenaciously held and made the basis of new acquirement.

Trusting that your association will have a most successful and enthusiastic meeting, and that the following year will see a large accession to your membership, I remain,

Very truly yours, JOHN W. ROOT,
President W. A. A.

Mr. Weary, Chairman of the Committee on Entertainment of the Western Association, reported very little action had been taken so far. A trip south had been talked of, but that might be interfered with by the Inter State Commerce Act.

A subscription list had been started and had reached the amount of \$460. A thousand would be needed. There will be other members of the association to see, who are not here today. The committee will get together as the time approaches and lay out a programme.

After some discussion of this subject, the excursions that might be undertaken, etc., a resolution was passed that the committee be authorized to draw upon the treasury for \$200 toward the entertainment of the Western Association of Architects.

The matter of the change of constitution was brought up, and it was decided to have the meetings annual hereafter instead of semi-annual. After some discussion an informal vote was taken, which showed August to be the month preferred. And after further discussion a resolution, as offered by Mr. Yost, was seconded and passed, making Article I of the by-laws hereafter read as follows:

The regular meetings of this association shall be annual, and occur on the third Thursday of August, unless otherwise ordered by the Executive Committee, thirty days' notice being given, the place to be chosen at each preceding regular meeting.

It was moved by Mr. Yost, and carried, that the present officers hold their offices until the next annual meeting in August, 1888, and that that meeting be held in Cleveland.

Mr. Forbush, inspector of buildings in Cincinnati, was called upon to report in regard to the working of the building law.

He reported some trouble in enforcing it, but that it was a very good law. Some points needed improving upon and then he could heartily recommend it for adoption for Cleveland and Toledo. There has been some talk of repeal, but it would be easy to remedy the objectionable features.

Mr. Forbush would be glad to go over the law with any of the architects or builders in Cleveland who are interested in the matter and who wish a good building law. The only change necessary to have this state law apply to Cleveland and Toledo, would be to have it amended so as to apply also to the law and the grade of those cities.

Copies of the law will be furnished on application to Mr. Walter R. Forbush, Cincinnati, Ohio.

Mr. Rapp offered a resolution which was seconded and passed, thanking the Cleveland members for their entertainment and the proprietors of the Weddell House for the courtesies extended.

The president announced that members would lunch at the Weddell House, after which carriages would be in waiting for a ride about the city. All were invited to meet at the Stillman Hotel at 8:30 p.m.

The convention adjourned to meet at Cleveland the third Thursday of August, 1888.

Our Illustrations.

Studies for residence for J. L. Lombard, Kansas City, Mo.; Burnham & Root, architects, Chicago.

Residence for Hillside Estate, Helena Valley, Wis.; F. L. Wright, architect, Chicago.

Residence for Bennezette Williams, Western Springs, Ills.; Henry Raeder & Co., architects, Chicago.

Residence for Frank E. Little, Minneapolis, Minn.; L. S. Buffington, architect.

Accepted design for Museum of Art, Detroit, Mich.; James Balfour, architect, Hamilton, Ont.

Design for Episcopal Church, Chicago; Clinton J. Warren, architect.

"The Talcott," Oberlin College, Ohio; Frank O. Weary and George W. Kramer, architects, Akron, Ohio.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Residence of M. W. Galt, Vermont avenue, Washington, D. C.; Wm. H. Poindexter, architect.

Hall in residence of Senator C. B. Farwell, Chicago; Treat & Foltz, architects.

Residence for Judge Brown, Detroit, Mich.

Residence for J. R. Crocker, Kenwood, Ills.; S. S. Beman, architect, Chicago.

Parish hall for St. John's church, Washington, D. C.; Hornblower & Marshall, architects.

Correspondence.

Editors *Inland Architect*:

INDIANAPOLIS, July 22, 1887.

In your issue for July you mention editorially the matter of the competition for designs for the Indiana soldiers' monument, but with, perhaps, some misapprehension of the real gist of the law creating and empowering this board. As it is of importance to start right in these matters, and lest an unfortunate and incorrect impression may be created that would deter designers of ability from taking an interest in this competition, I am instructed to furnish you a copy of the law creating and empowering this board.

On examination it will be discerned that the commission has plenary powers. It may prepare, select, or adopt a design. It is not hampered in any important particular as indicated in your article.

Under certain clauses it may so instruct competitors, and may make the conditions of the competition so just, that architects and sculptors of the highest rank, even if they do not enter the competition, may certainly commend the spirit in which the practical work of the enterprise is begun. The board is now engaged in preparing the code of the competition. Realizing that the amount of the appropriation is a generous one, and that not only are the opportunities for distinction great to the author of the victorious design, but that for once it is possible to obtain a public work that will be a noble work of art, it seeks the coöperation and good-will and a response worthy of the men, from the leading artists of the professions named, rather than a business contest with them. It hopes by showing true consideration, and a sense of the value of talent, time, and skill, to obtain some designs of commanding merit, through the competition, and to avoid any action that will leave the board amenable to any considerable criticism when the work is done.

When the instructions to competitors are issued a copy will be forwarded. Very respectfully yours,

J. F. GOOKINS,

Secretary S. S. & S. M. Commission.

Mosaics.

THE W. E. FROST MANUFACTURING COMPANY have taken the contract for the interior wood finish of the Chicago Auditorium building.

A DRAFTSMAN, and a gentleman of refined architectural education from one of the finest schools of art in Italy, diligent, and of good habits, desires an introduction to a *first-class architect* in Chicago, where he can have the opportunity to thoroughly acquaint himself with all the details of American design and construction. He requires no regular pay for the first six months, leaving that to the judgment of the architect engaging him. Further information may be obtained, and samples of the gentleman's work in designs and drawing can be seen by calling at the office of THE INLAND ARCHITECT, 19 Tribune building.

MR. CHAS. T. MURRAY, of Washington City, D. C., is entitled to the credit of inventing a cheap and practical device for the equable ventilation of rooms. The invention was suggested by the London *Lancet* declaration, that the law of natural philosophy which demonstrates the middle currents in a house are the minimum, demonstrates the proper place for ventilation in a room is the middle between the floor and ceiling. Mr. Murray's device consists of a row of holes bored in the meeting rails of window sashes, that are opened and closed at will by a sliding plate. The invention has been thoroughly tested in the government buildings at Washington, and with a result very flattering to the inventor.

THE resorts of Minnesota and the Northwest are attracting much attention, both on account of their beauty, healthfulness and accessibility. In the latter regard the new short line of the Burlington Route, C. B. & Q. R. R., plays an important part. Over it through trains are run to St. Paul and Minneapolis from either Chicago, Peoria or St. Louis, with the best equipment, including sleepers and dining cars, that the inventive genius of the day has produced. At St. Paul and Minneapolis direct connection is made with trains for all points in the Northwest, as well as Portland and Puget Sound points. At all principal ticket offices will be found on sale, at low rates, during the tourist season, round-trip tickets, via this popular route, to Portland, St. Paul, Minneapolis and all principal resorts in the Northwest. When ready to start, call on your nearest ticket agent, or address Paul Morton, general passenger and ticket agent, C. B. & Q. R. R., Chicago, Ill.

MANY years ago the writer had occasion to ride over the Chicago, Milwaukee and St. Paul Railway, and at that time noticed and commented upon the general "neatness and dispatch" with which every employé performed his work, and the politeness and attention with which every passenger was treated. This was when the road was new. Since that time the road has continually advanced in public favor. Its managers seem to have always realized that they were serving the public, and that there was something more due than the mere transportation called for by the ticket bought. The line from Chicago to St. Paul is fitted with every convenience. The trains leave and enter finely designed and commodious depots, and the stations at every town show the desire of this road that architectural effects should be carried out by the best designers in the profession. Beside the well-known branches of this road to the North and Northwest, the company will have a completely equipped road between St. Paul and Kansas City, open to the public about September 1. This will open this superb railway to the people of the Southwest, but even this can hardly add to the national reputation this road already enjoys.

Synopsis of Building News.

Athens, Ill.—Architect Geo. H. Helmle, of Springfield, reports: For Christian Church Society, brick church, 32 by 52 feet, and class room 16 by 32 feet; cost \$3,000; projected.

Atlanta, Ga.—Architects Bruce & Morgan report: Building good, workmen in demand, bricklayers scarce; for Georgia State School of Technology, three story and basement building, 130 by 78 feet, brick, stone and terra-cotta, slate roof; cost \$60,000; under way; A. McGilvray, contractor. Girls high school, three-story brick, stone and terra-cotta building, 102 by 98 feet, slate roof; cost \$30,000; John V. Bishop, contractor. For Gould & Van Dyke, six-store bank and office building, 68 by 102 feet, brick and stone, plate glass, vault work, steam heat, elevator, all modern improvements; cost \$75,000; under way; day work. For J. M. High, two-story frame residence, all modern improvements; cost \$10,000; under way; John V. Bishop, contractor. For E. H. Thornton, frame residence, 50 by 80 feet; cost \$8,000; not let. For city school board, two-story frame school building, 60 by 78 feet, slate roof; cost \$6,000; under way; W. A. Haygood, builder.

Alliance, O.—Architect Guy Tilden, of Canton, reports: For Atwell & Hair, three-story stone front store building, 55 by 90 feet; cost \$15,000; under way; day work. For Board of Education, remodeling college building, 100 by 100 feet; cost \$15,000; projected. For W. W. King, frame residence; cost \$30,000; projected.

Bloomington, Ill.—Architect Geo. H. Miller reports: Outlook is very good, but the present dry spell may cut down fall work. For Knights of Pythias, brick hall building, 100 by 120 feet, front three-stories, rear (hall) one-story, pressed brick facing, stone, terra-cotta and ornamental brick trimmings, steam, heat, opera chairs in hall; cost \$20,000; plans being figured. For Geo. H. Cox, brick residence, 48 by 60 feet; cost \$12,000; under way; John W. Evans & Son, builders. For James M. Smith, brick residence, 41 by 58 feet; cost \$7,500; under way; Wm. B. Packard, builder. For Thomas Erwin, brick stores and flats, 23 by 65 feet; cost \$6,500 under way; John E. Thomas, builder. For Bloomington Library Association, brick library building, 60 by 75 feet; cost \$19,000; under way; John W. Evans & Son, builders.

Buffalo, N.Y.—Architects Beebe & Son, report: For Zink & Hatch, stores, etc.; cost \$20,000; J. Beier & Son, builders. For D. Tucker & Co., stores; cost \$40,000; Remmell & Rupp, builders.

Architect E. A. Kent, reports: For George H. Dunbar, residence; cost \$12,000; J. R. Monroe, builder.

Architect A. C. Eisenwein, reports: For Shields & Healy, alterations in theater building; cost \$20,000. For Henry Weill, variety theater building; Berriek & Son, builders of both buildings.

Architect W. W. Carlin, reports: For L. V. Mosher, residence; cost \$4,500; C. R. Youngson, builder; contract for mason work on Emanuel Levi's theater building let to J. H. Tilden.

Architects Swan & Falkner, report: For E. O. Van Brocklin, frame residence; cost \$4,500. For Mrs. Steele, frame residence; cost \$4,000. For Mrs. Marsh, frame residence; cost \$4,000.

Canon City, Col.—Architect G. W. Roe, reports: He thinks there will be a building boom there in the near future. In consequence of the Atchinson, Topeka and Santa Fe railroad coming in, many eastern capitalists have purchased property, and many small buildings going up. For Wells & De Woody, two store rooms, two stories, 20 by 80 feet; second story, offices; pressed brick front, with cutstone trimmings, plate and cathedral glass in front, galvanized iron cornice, tin roof, etc., 44 by 80 feet; cost \$8,000; under way; G. W. Roe, builder. Also small work amounting to \$5,700; under way.

Canton, O.—Architect Guy Tilden reports: For Sheldon Nobles, two-story frame dwelling; cost \$5,000; under way; Peter Roemhild, builder. For Henry W. Harter, two-story frame dwelling; cost \$6,000; under way; Daniel Holwick, builder. For William Sherlock, two-story frame dwelling; cost \$6,000; Thomas Bard, builder. For J. F. Campbell, two-story frame dwelling; cost \$6,000; under way; J. L. Black, builder. For Geo. A. Barnes, two-story frame dwelling; cost \$6,000; projected. For Gilliam Manufacturing Co., three-story brick factory building, 36 by 101 feet; cost \$9,000; under way; Boetick & Sechrist, builders. For Harter Estate, three-story brick addition to store building 20 by 70 feet; cost \$5,500; projected. For G. D. Harter, three-story brick addition to store building, 29 by 50 feet; cost \$4,000; projected. For Gilliam Manufacturing Co., remodeling store building; cost \$3,000; projected. For Johnson Sherrick, two-story brick veneered residence; cost \$8,000; under way; Boetick & Sechrist, builders. For I. O. O. F. Association, remodeling brick block, 45 by 112 feet; cost \$16,000; under way; Robert Votan, builder.

Chicago, Ill.—Architects Burnham & Root, report: For First National Bank of Peru, Indiana, three-story bank building, 80 by 120 feet, brick and stone; cost 50,000. Dime Savings Bank, at Peoria, Ill., three-story stone building, 30 by 90 feet; cost \$30,000. For Chas. H. Needham, city, two-story brick and stone residence, 35 by 70 feet; cost \$20,000. For Philip Racher, two-story brick and stone residence, 32 by 75 feet; cost \$20,000. Church of Covenant, 80 by 120 feet, Forty-seventh and Belmont avenues; cost \$50,000. Church of Gabriel, 100 by 170 feet, Halsted street and Sherman streets; cost \$80,000. For Thos. Templeton, two-story brick and stone residence on Ashland avenue; cost \$15,000. For L. Smith, stone front residence, 25 by 75 feet, on Bellevue place; cost \$10,000. For J. L. Houghletting, block of brick and stone houses, on Astor place; cost \$40,000. Six-story addition to brick and stone hotel, at Duluth, Minn.; cost \$100,000. For J. L. Lombard, Kansas City, Mo.; stone residence, 50 by 80 feet, tile roof; cost \$40,000. For Wm. Scarritt, Kansas City, Mo.; two-story stone residence, 45 by 70 feet; cost \$40,000. United States Bank at Topeka, Kansas, five-story building, 40 by 120 feet,

brick and stone; cost \$80,000. For Lawrence Maxwell, Walnut Hill, Cincinnati, O., stone residence, 20 by 40 feet; also same for C. B. Matthews. For Walter Barker, Peoria, Ill.; brick residence; cost \$15,000.

Architect Alfred Smith, reports: For Mr. Keppler, five-story cold storage warehouse, 50 by 100 feet; Anderson brick, brownstone trimmings; cost \$35,000. For R. F. Conway, two-story store and flat building, 48 by 65 feet, on South Western Avenue; cost \$16,000. For Louis O'Neill, residence 22 by 70 feet, Groveland Park avenue; blue Bedford stone first story, hardwood finish; cost \$10,000. For Messrs. Stoneham, Lewis, Fetter and Barber, block of six stores and flats, southwest corner of Ogden avenue and Monroe street; cost \$45,000. Two three-story flat buildings, near Robey and Harrison streets; cost \$20,000. For Milton Lathrop, at Marshall, Texas, two-story store and flat building, 60 by 80 feet; cost \$15,000.

Architects Patton & Fisher are letting contracts for two new blocks of flats for Philip D. Armour. These are to be a continuation of those recently completed, and are for the purpose of providing an income for the Armour Mission. The new flats will be in two blocks, one on the corner of Dearborn and Thirty-fourth streets, and the other on Thirty-fourth and Butterfield streets. The total frontage will be 364 feet, and there will be forty-five flats in the two blocks. The work has been begun on the foundation. Estimated cost \$110,000. The new buildings, together with those just completed, will have an aggregate frontage of 728 feet, and contain ninety flats of six or seven rooms each.

Architect Henry Hildenger, reports: For Henry Bending, four-story and basement pressed-brick building, 25 by 80 feet; cost \$14,000; under way. For John Auer, four-story and basement store and flat, 42 by 92 feet; cost \$20,000; under way. For Aug. Kudt, two three-story and basement dwellings, 44 by 68 feet; cost \$13,000. For T. L. Hoerber, two-story and basement, 22 by 65 feet; cost \$7,000. For T. Holenbach, three-story and basement store and flat building, 25 by 48 feet; cost \$6,000. For A. Winiger, two-story and basement store and flats, 25 by 70 feet; cost \$7,000. For P. Steffens, two-story and basement store and flat, 25 by 80 feet; cost \$7,000.

Architect A. G. Baudry reports: Making plans for frame residence, at Lake View for Mr. Ed. Morier, hardwood finish interior, 35 by 50 feet; cost \$5,000; two stories and basement. One-story and basement addition, for J. T. Morand, on May street, 24 by 34 feet; cost \$2,000.

Architect S. Linderoth reports: For John Willems, four-story and basement store and flat building, 25 by 87 feet, brick and stone; cost \$12,000. For Paul E. Held, two-story and basement frame residence, 32 by 54 feet; cost \$6,000.

Architect J. J. Kouhn reports: For M. Doty, two-story brick and stone residence; cost \$10,000. For G. Chase, twenty-five one-story cottages, 22 by 34 feet; cost \$25,000. For D. W. Storrs, barn and stable; cost \$3,500.

Architect L. J. Bourgeois reports: For Wm. Gilman, two-story and basement and attic residence, 30 by 70 feet, on Washington boulevard near Ashland avenue; all modern improvements.

Cincinnati, O.—Reported by Mr. Lawrence Mendenhall. For a preface to my report there is not much to say, and consequently I will be brief. As regards trade, the opinions expressed are like a "go-as-you-please" walking, some being favorable, while others are quite the contrary. I feel that I am right when I say trade would be vastly better if those persons who are continually promulgating "wet blanket" sort of opinions, would at least try to assume a more cheerful view of the business situation. We all know that trade could be better, but do not care to have the fact rubbed in.

The plans and drawings for our city hall were exposed to public gaze and criticism on June 15, fourteen architects submitting designs. With all due fairness to foreign talent, and their work, which, with perhaps two exceptions, is good, I beg to say that our own city architects have, in my estimation, the better designs every way. The following are the names of the competitors: J. F. Denson, Washington, D.C.; Wm. M. Walter and Johnson & Scobey, Chicago, Ill.; E. L. Rice, Wilmington, Del.; James Balfour, Ontario, Canada; J. W. Yost, Columbus, Ohio; Schaarschmidt & Sulzer, New York; H. E. Siter, Hannaford & Sons, S. E. Des Jardins, J. W. McLaughlin, Schureman & Kennedy, Cincinnati, and two unknown. After a careful examination the board accepted the designs prepared by Hannaford & Sons, and appointed them superintendents. In addition prizes were awarded Messrs. McLaughlin, Siter, Des Jardins, and Johnson & Scobey, for meritorious designs. The erection of new market houses is again being talked about, but nothing definite has as yet been determined upon.

Architects Buddemeyer, Plympton & Trowbridge, have prepared plans for a three-and-a-half story addition to Hughes' high school building, comprising six classrooms, with cloakrooms to each, two new entrances, fireproof stairways and corridors, and janitor's apartments in the attic, brick with slate roof; contracts let; cost \$18,336; owner, Board of Education. Also three-room addition to Twenty-seventh District schoolhouse, brick with slate roof; cost about \$7,500; owner, Board of Education. Also addition of six rooms to Twenty-fifth District schoolhouse, fireproof stairway and corridor, cloakrooms, etc., three stories, brick with tin roof; contracts not let; owner, Board of Education. Picturesque residence for Wm. Pugh, Esq., Shillito street, Avondale, Ohio; half timber and cement plastered; hall, six rooms and bath, slate roof; cost about \$2,700; not let.

Architect A. D. Elzner has his time well employed, but his work upon which he is at present engaged, is not in shape for publication.

Architect H. E. Siter has his time also well occupied, and among the important plans on the boards, is the one for the new fire engine house. It is decidedly architecturally ahead of any of the houses heretofore, notwithstanding its simplicity of construction. It is built on an irregular-shaped lot, 84 feet depth by 25 and 38 feet in width. The building will be built of brick, with full stone trimmings, two stories high with a tower 75 feet high above the pavement.

Wm. A. Lay, fresco artist, reports: Work on German M. E. church, Portsmouth, Ohio; Presbyterian church, Murdock, Ohio; Presbyterian church, Mayslick, Kentucky. He has recently completed work on the Baptist church and St. John's Episcopal church at Knoxville, Tennessee; United Presbyterian church at Springfield, Ohio; Evangelical church at Portsmouth, Ohio, and the German Protestant church here.

Architect Wm. Martin Aiken is to be heartily congratulated over the success achieved in the residence of Chas. Anderson, Esq., Walnut Hills. It is built of Massillon, Ohio, stone, of a red color, which shades down to beautiful shades of pink and salmon. The whole construction is quite bold, and decidedly original in treatment, and the residence when completed will not only be an ornament to Walnut Hills, but an addition to our many beautiful suburban mansions.

Architect Geo. W. Rapp reports the following: W. W. Scarborough will build a store building six stories high of stone and iron; size of building, 25 by 90 feet; cost \$20,000. For the Cinte Ice Manufacturing and Cold Storage Co., temporary frame buildings with the exterior covered with corrugated iron; one building, 77 by 116 feet, will be devoted to ice tanks; the boiler room will be 58 by 60 feet, and the engine room 55 by 58 feet; the smokestack will be 135 feet high.

Architect S. E. Des Jardins reports the following as a few of the plans now on his boards: Dr. A. W. Johnston, Danville, Ky., will build an office building of eight rooms, of brick with slate roof; there will be all the modern improvements and the building finished with hardwood finish; cost \$5,000. G. W. Robson, Esq., Bellevue, Ky., is building a brick residence of nine rooms, with slate roof and hardwood finish; cost \$7,000. Mr. F. Burckhardt is about to build a pressed brick residence, with terra-cotta and freestone ornaments; the building will be four stories high with a basement, and when completed, one-half will be occupied by the conservatory of music and the other by the owner himself; cost \$20,000. C. W. Baker, Esq., will build a stone residence of fourteen rooms, containing all modern improvements; the roof will be tile, and the finish hardwood in first story and pine in second; cost \$18,000.

Clarksville, Tenn.—Architects Reid Bros., of Evansville, Ind., report: Remodeling Christian church building; cost \$6,000; contract not let.

Coldwater, Mich.—Architect M. H. Parker reports: For Branch county, two-story and basement brick and stone court house, 104 by 88 feet, slate roof, steam heat, etc.; cost \$40,000; work to commence at once; Crocker & Hudnutt, of Big Rapids, contractors.

Dallas, Tex.—Architects Ullrich and Tozer, successors to J. E. Flanders, report: Very busy, with better prospects this fall than ever known heretofore. Under way, for Knepfle & Son, three-story stone front, 31 by 75 feet; cost \$17,000. Morgan and Morris, builders. Wellesley Building, brick, stone trimmings, 80 by 100 feet; cost \$15,000; projected. For E. M. Tielman, three-story brick warehouse, stone trimmings, 50 by 200 feet; cost \$18,000; under way. McCord, builder. For B. G. Lindsley, two-story brick, stone trimmings, 50 by 150 feet; cost \$14,000; under way. Caruthers, builder. For Williams & Hindman, brick hotel, stone trimmings, 80 by 100 feet; cost \$16,000; under way. Johnston & Lyster, builders. Add Kansas City.

Architect C. B. Lakin reports: For M. S. Tyler, block of residences, 75 by 150 feet; cost \$85,000; under way. For J. T. Powers, residence, 32 by 60 feet; cost \$8,000; under way. For M. S. Tyler, residence, 30 by 58 feet; cost \$8,500; under way. For J. T. Powers, residence, 30 by 62 feet; cost \$8,700; under way. For H. L. Burgess,

residence 30 by 55 feet; cost \$7,000; under way. L. W. Dibelbiss, builder. For M. S. Tyler, residence, 35 by 60 feet; cost \$10,000. For C. L. Dobson, residence, 33 by 59 feet; cost \$6,000; under way.

Decatur, Ill.—Architect Geo. H. Miller, of Bloomington, reports: For German M. E. Society, church building, 38 by 60 feet; cost \$3,000; under way. For First Baptist Society, church building, 71 by 80 feet; cost \$16,000; plans being figured.

Delaware, O.—Architects Weary & Kramer, of Akron, report: For M. E. Society, church building; to cost \$30,000; under contract.

Elba, Neb.—Architect C. C. Rittenhouse, of Hastings, reports: For School District, frame schoolhouse, 46 by 62 feet; cost \$5,000; projected.

Elkhart, Ind.—Architects N. Weaver & Son report: Present condition and outlook good. For John McNaughton, two-story brick-venered dwelling, 29 by 59 feet, metallic shingles, furnace heat; cost \$3,500; under way. For M. R. Simons, two-story frame dwelling, 38 by 50 feet; cost \$3,000; projected. For James Cornish, three-story brick store, 22 by 80 feet, furnace heat; cost \$6,000; under way. Jno. Werutz, builder. For R. Blackburn, three-story brick and stone store building, 45 by 80 feet; cost \$7,000; projected. For M. E. church, improvements, etc.; cost \$5,000; projected.

Evansville, Ind.—Architects Reid Bros. report: Wm. Field, remodeling frame dwelling, slate roof; cost \$3,500; Bippers & Kauzler, builders.

Fort Smith, Ark.—Architects Nier, Hogg & Byram report: For J. Sparks, store building, 50 by 100 feet; cost \$15,000; under way. For J. Klein and J. D. Foster, two frame dwellings; cost \$4,500 each.

Grand Ridge, Ill.—Architect Wm. A. Youmans, of Ottawa, reports: For Thos. Austell, farm house; to cost \$4,000.

Great Bend, Kan.—Architect Z. O. Fligg reports: Our city has had a fair growth this season and prospects for the future are favorable. For C. Fair, two-story brick and stone store building, 100 by 85 feet; cost \$20,000; under way; day work. For G. W. Nimmocks, two-story brick and stone store building, 25 by 90 feet; cost \$4,000; plans in preparation.

Greenville, O.—Architect Jno. A. Hasecoster, of Richmond, Ind., reports: For John Clark, two-story brick and stone building, slate roof; cost \$4,000; projected.

Greenville, Pa.—Architects Kannengieser & Kling, of Youngstown, O., report: For Dr. B. Mossman, three-story brick and stone residence, 20 by 70 feet; cost \$5,000; projected; plans under way.

Hastings, Neb.—Architect C. C. Rittenhouse reports: Prospects good; material gradually going higher; brick scarce; good opening for a first-class brickmaker with capital. For Shedd & Jones, three-story brick store building, 66 by 90 feet; cost \$15,000; under way. T. E. Farrell, builder. For Lincoln Building Association; three-story brick store and office building, 50 by 125 feet; cost \$26,000; under way. McEl. Henery & Johnson, builders. For Enterprise Building Association, three-story brick store building, 115 by 100 feet; cost \$32,000; under way. McEl. Henery & Johnson, builders. For School Board, two-story and basement schoolhouse, 96 by 104 feet; cost \$26,000. Scales & Clark, builders. For Jacob Baily, two-story residence, 26 by 54 feet; cost \$7,500; under way. J. R. Sims, builder. For Dr. L. Loda, two-story residence, 34 by 52 feet; cost \$5,000. H. C. Cook, builder. Just completed, the new Masonic Hall; cost \$23,000; said to be the finest west of Chicago.

Helena, Ark.—Architect B. J. Bartlett, of Little Rock, reports: For Helena Opera House Co., E. C. Homer, secretary; opera house, 60 by 100 feet; cost \$20,000; seating capacity, \$1,000.

Holdrege, Neb.—Architect C. C. Rittenhouse, of Hastings, reports: For E. D. Einsel and others, two-story brick story building, 75 by 80 feet; cost \$15,000; contract not let.

Hunter, Dak.—Architect A. F. Gauger, of St. Paul, Minn., reports: For A. F. Norrish, two-story frame dwelling, 32 by 36 feet; closets and bath, stained glass, etc.; cost \$3,000.

Hutchinson, Kan.—Architect E. P. Brink, of Kansas City, Mo., reports: For John Peterbaugh, two-story frame dwelling, 42 by 87 feet, also stable; cost \$25,000; under way. For Rock Island Hotel Co., four-story cutstone hotel building, 240 by 100 feet; slate roof, steam heat, etc.; cost \$100,000; under way. Hermann Stroch, builder.

Independence, Mo.—Architects Nier, Hogg & Byram, of Kansas City, report: For R. M. Wright, frame dwelling; cost \$5,000. For Rufus Wilson, frame dwelling; cost \$6,500; taking figure. Brick and terra-cotta Presbyterian church, 75 by 90 feet; cost \$35,000; J. W. Adams, builder.

Architect E. P. Brink, of Kansas City, reports: For J. R. Gudgell, two-story frame residence, 42 by 65 feet, all modern improvements; also stable; cost \$12,000; plans finished.

Ionia, Mich.—Architect Claire Allen, reports: For Belding Bros., three-story and attic store, hotel and opera house building, 101 by 100 feet; cutstone front and side, galvanized iron cornice, slate roof, plate glass, steam heat, mantels, electric lights, bells, etc.; plumbing; cost \$27,000; work commenced August 1; O. Waterbury, contractor. For the Tower estate, A. E. & O. S. Tower, administrators, plans prepared for two-story brick and stone business block; cost \$7,000; contract not let.

Kansas City, Mo.—Architect E. P. Brink, reports: Present condition and outlook for building "most excellent." For Theodore Stegner, two-story brick and terra-cotta residence, 40 by 58 feet; also stable; cost \$15,000; under way. For E. A. Phillips, block of twelve four-story dwellings, 208 by 40 feet; cutstone front, slate roof, steam heat, etc.; cost \$100,000; under way. For F. B. Ray & Co., block of eight four-story dwellings, 38 by 200 feet; brick and terra-cotta, furnace heat, slate roof, mantels, electric work, etc.; cost \$60,000; under way. For E. B. Shearer, two-story stone residence, 44 by 65 feet; slate roof, furnace, mantels, etc.; also stables; cost \$18,000. For C. C. Quinlan and J. M. Brainnock, block of fifteen four-story dwellings, 370 by 40 feet; cutstone front, slate roof, steam heat, mantels, electric work, etc.; cost \$120,000; plans finished. For L. E. Prindle, block of six four-story brick and terra-cotta dwellings, 40 by 160 feet; furnace, mantels, electric work, etc.; cost \$45,000; not let. For Tullis & Ray, block of fourteen four-story dwellings, 280 by 40 feet; cutstone fronts, steam heat, mantels, electric work, etc.; cost \$130,000; under way. T. J. Carpenter, builder. For R. E. Higgs, block of ten stone front dwellings, 200 by 39 feet; slate roof, and all modern improvements; cost \$60,000; also, block of three stone front dwellings, 60 by 38 feet; stone and brick, slate roof, steam heat, mantels, electric work; cost \$22,000; under way. J. S. Mitchler, builder. For E. B. Shearer, two-story brick residence, 33 by 66 feet; slate roof; cost \$9,000; under way. For J. R. Owens, two-story frame dwelling, 35 by 52 feet, and stables; cost \$7,000; under way. For Evans & Sturtevant, block of eight stone front dwellings, 140 by 50 feet; slate roof, steam heat, electric work, etc.; cost \$65,000; under way. A. Bixler, builder. For H. N. Garland, block of eighteen stone houses, 423 by 40 feet; steam heat, slate mantels, natural gas, and all improvements; cost \$200,000; under way. J. Powell, builder. For F. C. Marsh, block of three stone and brick dwellings, 72 by 68 feet; slate roof, furnaces, all improvements; cost \$30,000; under way. J. Stremple, builder.

Architects Nier, Hogg & Byram report: For J. W. Swain, five three-story tenements, 58 by 104 feet, brick and stone; cost \$23,000. R. W. Vaughn, contractor. For C. W. Bryan, three-story brick store building; cost \$6,500; taking figures.

Architect F. J. W. Hart prepared plans for the National Agricultural Exposition building, 450 by 255 feet, brick, stone, iron, terra-cotta and glass; work commenced in May; building to be completed in September; address James Goodin.

Larued, Kan.—Architects Weary & Kramer, of Akron, O., report: Schoolhouse; to cost \$6,000; under contract.

Liberty, Mo.—Architect E. P. Brink, of Kansas City, reports: For D. Hughes & Co., three-story brick and terra-cotta bank building, 38 by 67 feet, slate roof, steam heat, etc.; cost \$20,000; under way; day work.

Little Rock, Ark.—Architect B. J. Bartlett reports: For H. L. Fletcher, frame dwelling; cost \$3,165; Casey & McDowell, contractors.

Louisville, Ky.—Architect H. Wolters reports the following work in hand: Hotel at Sheffield, Ala.; cost \$175,000. Court house to cost \$250,000, and a church to cost \$45,000 at Birmingham, Ala. Union passenger station at Memphis, Tenn.; cost \$400,000. Court house at Evansville, Ind.; cost \$400,000. For Kentucky Wagon Co., factory and sheds at Louisville, Ky.; cost \$120,000. Also, about \$500,000 worth of work that will be reported later.

Mansfield, O.—Architect Guy Tilden, of Canton, reports: For Richland county, remodeling court house; cost \$12,000.

Marlboro, O.—Architect Guy Tilden, of Canton, reports: For board of education, brick veneered school building, 71 by 79 feet; cost \$6,000; projected.

McCook, Neb.—Architect C. C. Rittenhouse, of Hastings, reports: For German Lutheran Society, brick and stone church, 38 by 70 feet; cost \$5,500; contracted.

Mendota, Ill.—Architect Wm. A. Youmans, of Ottawa, reports: An organ factory building; to cost \$4,000.

Mt. Vernon, Ind.—Architects Reid Bros., of Evansville, report: For school board, two-story brick school building, 40 by 70 feet, tin roof; cost \$7,000; plans under way.

New Lisbon, O.—Architect Guy Tilden, of Canton, reports: For Gailey & Firestone, stone front store building, 48 by 88 feet; cost \$13,000; under way.

New Philadelphia, O.—Architect Guy Tilden, of Canton, reports: For Tuscarawas county, brick and stone insane asylum, 36 by 75 feet; cost \$12,000; under way. Fred. Webber, builder.

Niles, O.—Architects Kannengeiser & Kling, of Youngstown, report: For Rev O'Brien, brick and stone church, 48 by 105 feet; cost \$14,000; projected.

Oberlin, O.—Architects Weary & Kramer, of Akron, report: two ward school buildings; cost \$20,000; under contract.

Ormond, Fla.—Architect Wm. A. Youmans, of Ottawa, Ill., reports: For Amasa Watson, seaside residence; cost \$3,000.

Ottawa, Ill.—Architect Wm. A. Youmans reports: For the Western Cottage Organ Co., four-story factory building, 120 by 256 feet; cost \$30,000. For C. Bains, store building, 60 by 90 feet; cost \$4,000. For B. Hess, residence; cost \$4,000. For M. Stiefel, residence; cost \$4,000. For H. J. Gillen, residence; cost \$6,000. For D. Lindstrom, residence; cost \$3,000. For B. F. Shortwell, residence; cost \$5,000. For The Pioneer Fireproof Construction Company, twelve cottages; cost \$1,000 each. For Norman Kilburn, cottage; cost \$1,000. For A. Johnson, cottage; cost \$1,000. For D. Swann, of Mendota, farm house; cost \$4,000; barn, cost \$6,000.

Oxford, Neb.—Architect C. C. Rittenhouse, of Hastings, reports: For School District, brick and stone schoolhouse, 48 by 64 feet; cost \$6,000; projected. Brick and stone church, 84 by 108 feet; cost \$40,000; projected.

Owensboro, Ky.—Architects Reid Bros., of Evansville, Ind., report: For J. H. Hickman, two-story frame residence, slate roof; cost \$10,000; contracts not let.

Princeton, Ind.—Architects Reid Bros., of Evansville, report: For School Board, two-story and basement brick school building, 80 by 80 feet, slate roof; cost \$16,000; plans under way.

Ravenna, O.—Architect Guy Tilden, of Canton, reports: For Portage County, brick and stone insane asylum, 36 by 67 feet; cost \$10,000; projected.

Richmond, Ind.—Architect Jno. A. Hasecoeter, reports: Building business improving for the latter part of the season. For Kelly & Hutchinson, four-story building, 57 by 96 feet; Ohio brown and serpentine greenstone, tin and slate roof; cost \$35,000; under way; separate contracts.

Architect Wm. S. Kaufman, reports: Contract awarded T. H. Harrison, of Richmond, for Earlham College building, to inclose building ready for plastering for \$24,600, not including foundations. Contract awarded to Smith & Hall, of Richmond, for Williamsburgh schoolhouse, for \$4,351. Earlham Science Hall contract awarded to Kidder & Gates, for \$4,740.

Richmond, Va.—Architect B. J. Black reports: Not much work spoken of at present but mechanics are all busy. For A. J. Ford Casino Theater, brick and stone, tin roof, parquet and two circular galleries, seating capacity 1,400, 53 by 127 feet; cost \$34,000; nearly finished; F. A. Welty, builder. For West Point Land, Navigation and Improvement Co., brick casement and three-story frame hotel at West Point, Va., 120 rooms, main building 40 by 126 feet, wing 38 by 100 feet; cost \$28,000; commenced; Joseph Heppert, builder. For Colored Society Liberty Hall, brick, stone and terra-cotta, three-stories and basement 25 by 90 feet; cost \$10,000; under way; Joseph Heppert, builder. At Petersburg, Va., new wards and dining rooms for Central Insane Asylum; cost about \$20,000; will be let August 3, 1887.

Salina, Kan.—Architects Eckel & Mann report: For a syndicate, four-story brick and stone hotel, 100 by 103 feet; cost \$50,000; R. K. Allen, contractor.

St. Louis, Mo.—Architect Fred. W. Folk, reports: Plenty of small work going on at present. For Fred. Munding, two-story addition, 22 by 60 feet; cost \$1,785; under way; David Stevens, builder. For E. S. Cronk, brick dwelling, 21 by 55 feet; cost \$4,200; under way. For Geo. Bainhoff, brick dwelling, 28 by 56 feet; slate roof, stained glass, tiling, etc.; cost \$4,000; under way. For J. D. Healy, store and flat, 36 by 57 feet; brick, stone and copper, slate roof; cost \$4,500; under way. For John J. Keene, pressed brick and stone dwelling, 22 by 56 feet; cost \$4,400; projected. For Andrew Parle, stone front store and flats, 18 by 52 feet; cost \$3,000; projected.

Permits have been issued for the following, all of which are under way: Wm. Rolfes, two-story brick store and dwelling, 40 by 56 feet; cost \$7,200; J. C. Hacker, builder. Mrs. E. Asshoff, two-story brick store and dwelling, 50 by 52 feet; cost \$6,500; Gæsse & Remmers, builders. J. W. Donaldson, two-story brick dwelling, 48 by 52 feet; cost \$12,500; Gæsse & Remmers, builders. Mound City R. R. Co., one-story brick car shops, 148 by 145 feet; cost \$12,000; O'Malley Bros., builders. H. Miller, two-story brick store and dwelling, 23 by 72 feet; cost \$5,000; G. W. Farnum, builder. G. Jausen, two two-story brick flats, 40 by 50 feet; cost \$5,000; P. J. Smith, builder. C. O'Callahan, three two-story brick dwellings, 18 by 45 feet each; cost \$9,000; M. Connolly, builder. J. Brinkmann, two two-story brick tenements, 42 by 55 feet; cost \$6,000. Hyde Park Brewing Co., one-story stock house, 63 by 143; cost \$20,000; sub-let. Christian Publishing Co., two-story brick addition, 50 by 38 feet; cost \$6,000; W. A. Pick, builder. M. B. Scanlon, two two-story brick tenements, 26 by 45 feet; cost \$8,000; M. B. Scanlon, builder. J. Dockey, four two-story brick tenements, 56 by 50 feet; cost \$5,000; under way; Mackey & Son, builders. Nixdorf Manufacturing Co., two-story brick factory, 125 by 145 feet; cost \$7,000; Wm. Kucksick, builder. P. Griffin, two-story brick store and dwelling, 25 by 70 feet; cost \$5,300; D. Cregan, builder. F.

Krampe, two two-story brick tenements, 37 by 68 feet; cost \$6,000; A. W. Rocklage, builder. H. W. Landedale, two-story brick storage house, 50 by 107 feet; cost \$6,200; G. Huston, builder. Citizens' R. R. Co., two-story brick car house, 115 by 394 feet; cost \$18,000; Wm. Cochran, builder. Mrs. S. Rose, two-story brick dwelling, 23 by 58 feet; cost \$7,000; A. Uhri & Son, builders. J. Fay, two-story brick dwelling, 23 by 55 feet; cost \$5,000; sub-let.

St. Paul, Minn.—Architect A. F. Gauger reports: For Sherwood Hough, five three-story houses, 120 by 72 feet, brick, stone and terra-cotta trimmings, slate and felt roof, galvanized iron cornices, skylights, stained glass, closets and baths, steam heat, hardwood finish and tiling, wood mantels, dumb waiters, electric lights, etc.; cost \$40,000; T. Reardon, carpenter; Johnston Bros., masons. For D. A. Schulte, eight-story and basement store and office building, 50 by 120 feet, first story red granite, pressed brick above, trimmed with terra-cotta, iron work, elevators, felt roof, steam heat, fire-proofed, stained glass, closets, etc., skylights, hardwood finish and tiling, marble mantels, steam power, electric lights, etc.; cost \$50,000; T. Reardon, carpenter; Johnston Bros., masons. For A. S. Elfelt, two-story frame residence, 26 by 72 feet; cost \$8,000. For Andrew Muir, three three-story residences, 65 by 68 feet, pressed brick, Kasota stone; cost \$16,000.

Architect C. A. Wallingford reports: For St. Paul Park Co., twenty-five cottages; cost \$1,000 each; twenty cottages, cost \$2,000 each; and five cottages, cost \$3,000 each. Also a frame hotel, to cost \$10,000. For John Dow, frame residence; cost \$7,000. For Lucian Warren, brick residence; cost \$9,000.

San Luis Obispo, Cal.—Architect Jno. A. Hasecoeter, of Richmond, Ind., has prepared plans for Mr. Chas. Reed for a frame cottage; to cost \$3,000.

Seneca, Ill.—Architect Wm. A. Youmans, of Ottawa, reports: For a syndicate, one hundred cottages; cost \$300 each. For N. J. Robinson, bank building; cost \$2,300.

Sharon, Pa.—Architects Kannengeiser & Kling, of Youngstown, Ohio, report: For Muldoon & Fisher, two-story brick store, 40 by 80 feet; cost \$8,000; under way; day work.

Sidney, Neb.—Architect C. C. Rittenhouse, of Hastings, reports: For School District, two-story stone schoolhouse, 56 by 72 feet; cost \$15,500; — Pease, contractor.

Sidney, O.—Architect John A. Hasecoeter, of Richmond, Ind., reports: For Lutheran Society (James Burkhard chairman building committee), brick and stone church, 45 by 76 feet; cost \$8,000; projected.

Springfield, Ill.—Architects Bullard & Bullard report: Outlook very fair. For J. E. Hurnick, two-story frame dwelling 34 by 44 feet, cellar, furnace, etc.; cost \$2,500; drawings completed. For R. H. Patton, one-story frame dwelling, 42 by 42 feet; cost \$2,000; under way; Wm. Mayhew, builder. For J. H. Creighton, two-story frame dwelling, 32 by 66 feet, hot air heat; cost \$4,500; drawings under way. For Harry Barker, one-story frame dwelling, 28 by 36 feet, furnace heat; cost \$1,500; under way; Johnson, builder.

Architect Geo. H. Helmle reports: For Dr. J. H. Utley, two-story frame cottage, 35 by 50 feet, furnace heat, wood mantels; cost \$6,000; projected; plans completed. For J. J. Drury, two-story frame cottage, 38 by 48 feet; cost \$2,500; plans completed. For Mrs. D. P. Lyon, two-story cottage, 20 by 48 feet; cost \$2,200; Daniel Raymond, builder. For Hartman & Pfeifer, two two-story cottages, 30 by 46 feet; cost \$4,000; under way; C. Feaster, builder. For Ed. S. Johnson, remodeling office, etc.; cost \$3,200; under way; John F. Rhodes, builder. For Geo. Passfield, remodeling store; cost \$2,000; D. P. Hopping, contractor. For Milton Hay, three-story brick and stone store building, 36 by 70 feet; cost \$7,000; projected. For Matt Neff, two-story store and dwelling, 24 by 60 feet; cost \$4,000; projected. For Dennis Grant, two-story frame dwelling; cost \$2,500. For Wm. Hoehn, one-story frame cottage; cost \$2,000; projected. For M. E. Society, frame church; cost \$2,000.

Summit, O.—Architects Weary & Kramer, of Akron, report: Infirmary buildings, to cost \$12,000; under way.

Sutton, Neb.—Architect C. C. Rittenhouse, of Hastings, reports: For John C. Merrill, and others, two-story brick store building, 96 by 100 feet; cost \$17,500; not let.

Tobias, Neb.—Architect C. C. Rittenhouse, of Hastings, reports: For state bank, two-story brick bank building, 25 by 70 feet; cost \$4,860; contracted.

Utica, Ill.—Architect Wm. A. Youmans, of Ottawa, reports: A hotel building, to cost \$20,000.

Wadsworth, O.—Architects Weary & Kramer, of Akron, report: Normal school building, to cost \$25,000; contracts not let.

Wichita, Kan.—An architect not giving his name reports: For Mr. Zeininger, three-story brick and stone building, 50 by 100 feet; cost \$15,000; projected. For Mr. Steadman, three-story brick and stone building, 50 by 130 feet; cost \$17,000; projected. For Manchester Town Company, frame depot, 30 by 32 feet; cost \$2,000; projected.

Winfield, Kan.—Architect S. A. Cook reports: One-story stone Catholic church building, 50 by 80 feet, slate roof; cost \$25,000; under way; James Connor, superintendent. For Van Vleet & Sage, two-story stone store building, 50 by 80 feet; cost \$9,000; under way. For Soward & Asp, three-story and basement store and office building, 93 by 75 feet; cost \$30,000; plans ready. For A. J. Thompson, three-story and basement store and office building, 50 by 140 feet; cost \$28,000; plans ready. For Curus & Mauser, five-story stone hotel building, 75 by 120 feet; cost \$50,000; plans ready. For J. P. Bader, two-story frame residence, 38 by 67 feet; cost \$6,000; under way; D. E. F. Jones, builder. For Henry Brown, two-story stone residence, 36 by 58 feet; cost \$6,300; plans ready; For Thos. McDougall, three-story stone store building, 25 by 120 feet; cost \$9,000; projected.

Wyandotte, Kan.—Architect E. P. Brink, of Kansas City, Mo., reports: For Wm. Freeman, two-story frame dwelling, 40 by 72 feet, stable; cost \$12,000; not let.

Yuma, Col.—Architect C. C. Rittenhouse, of Hastings, Neb., reports: For school district, frame schoolhouse, 46 by 62 feet; cost \$5,000; contracted.

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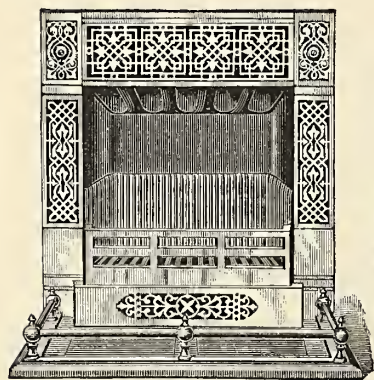
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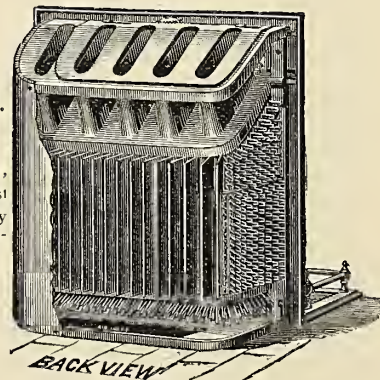
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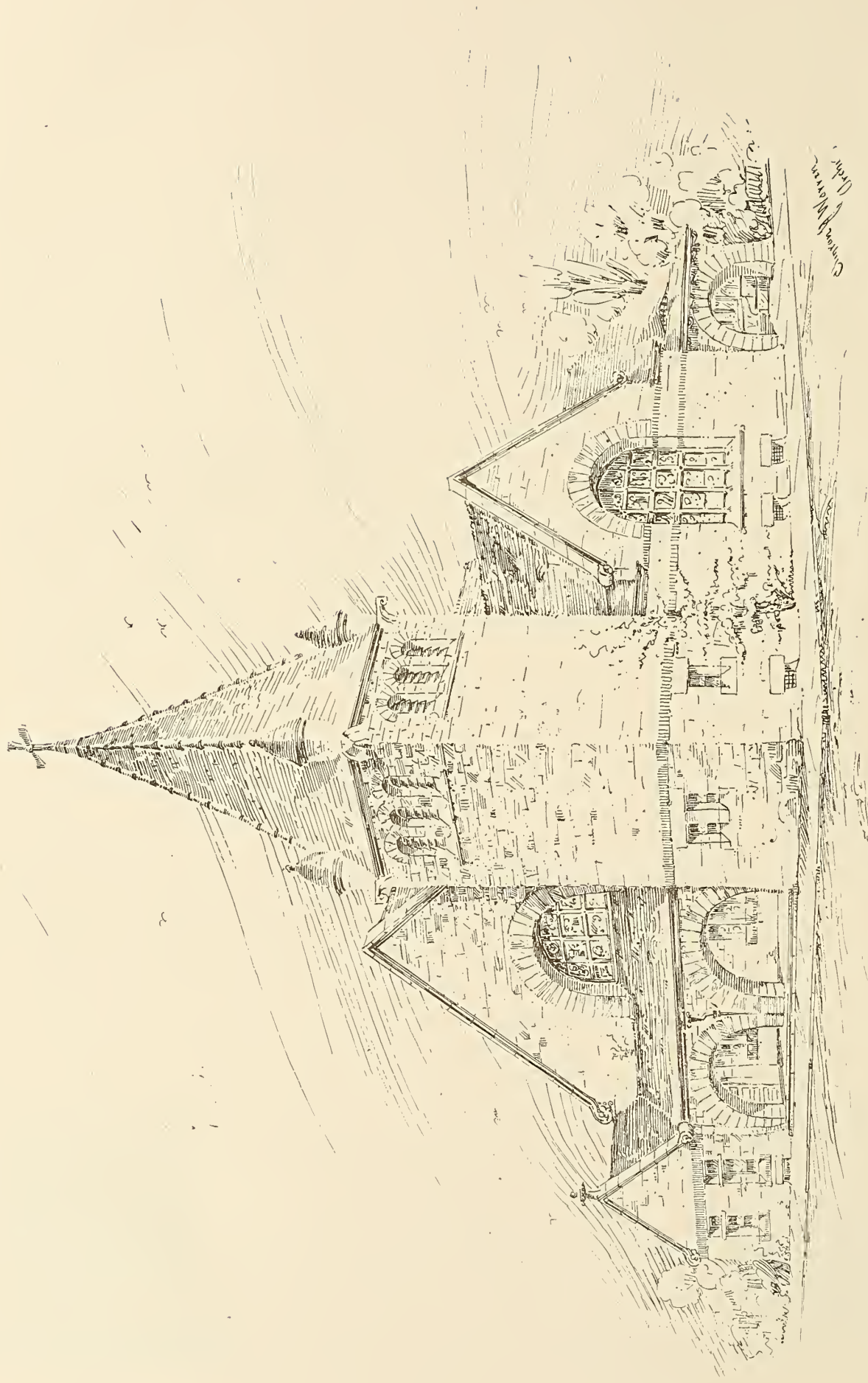


FRONT VIEW.



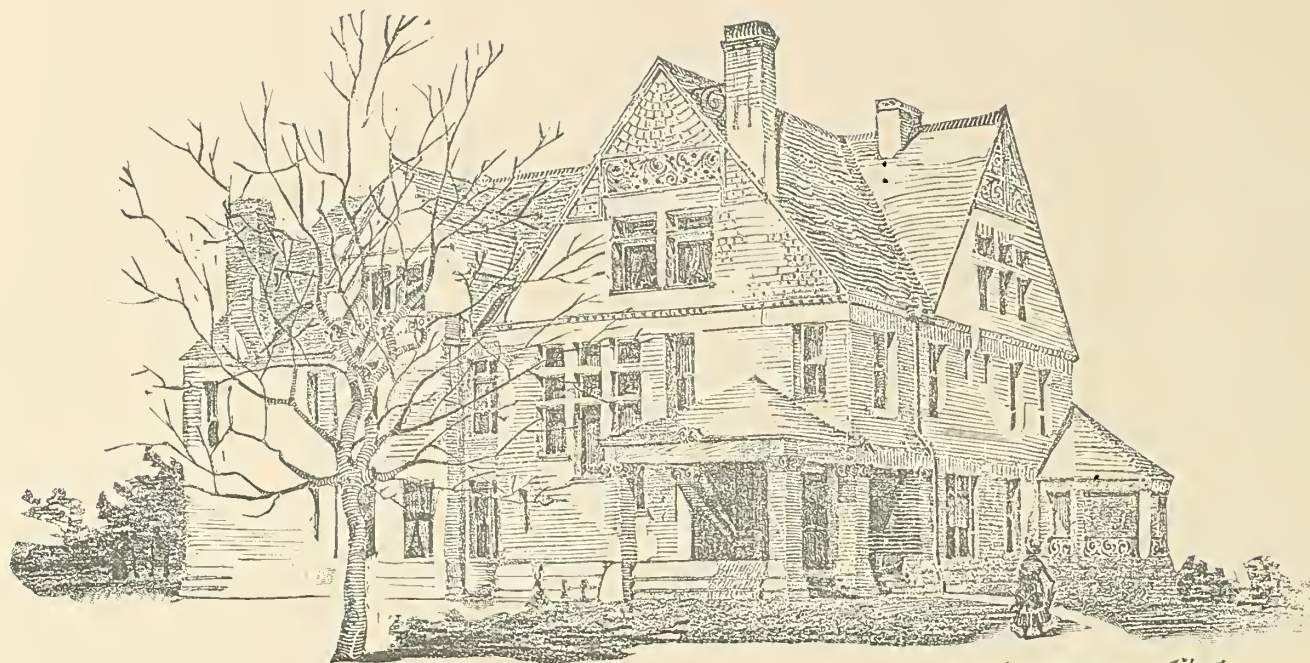
BACK VIEW.

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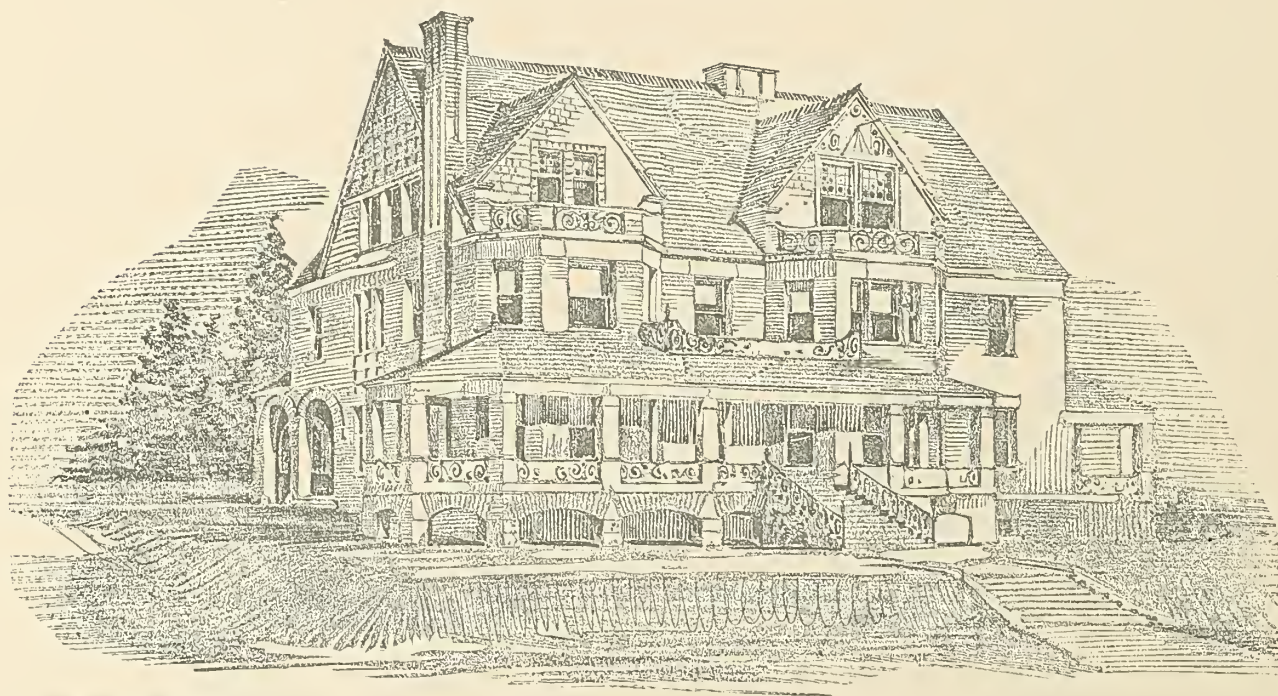


DESIGN FOR EPISCOPAL CHURCH, CHICAGO.

CLINTON J. WARREN, ARCHITECT.



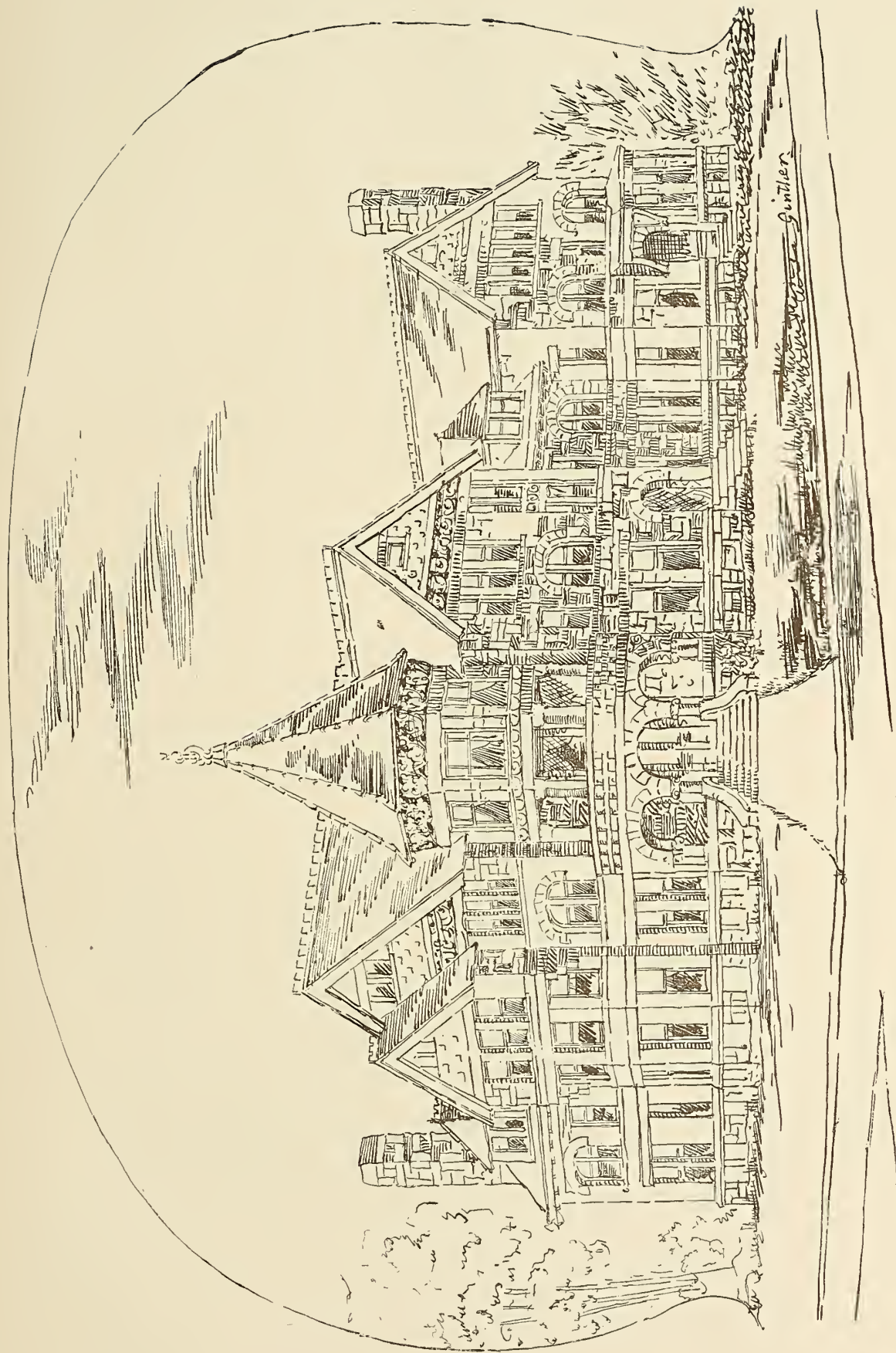
Burnham & Root Architects.



REPRODUCED FROM PENCIL DRAWING.

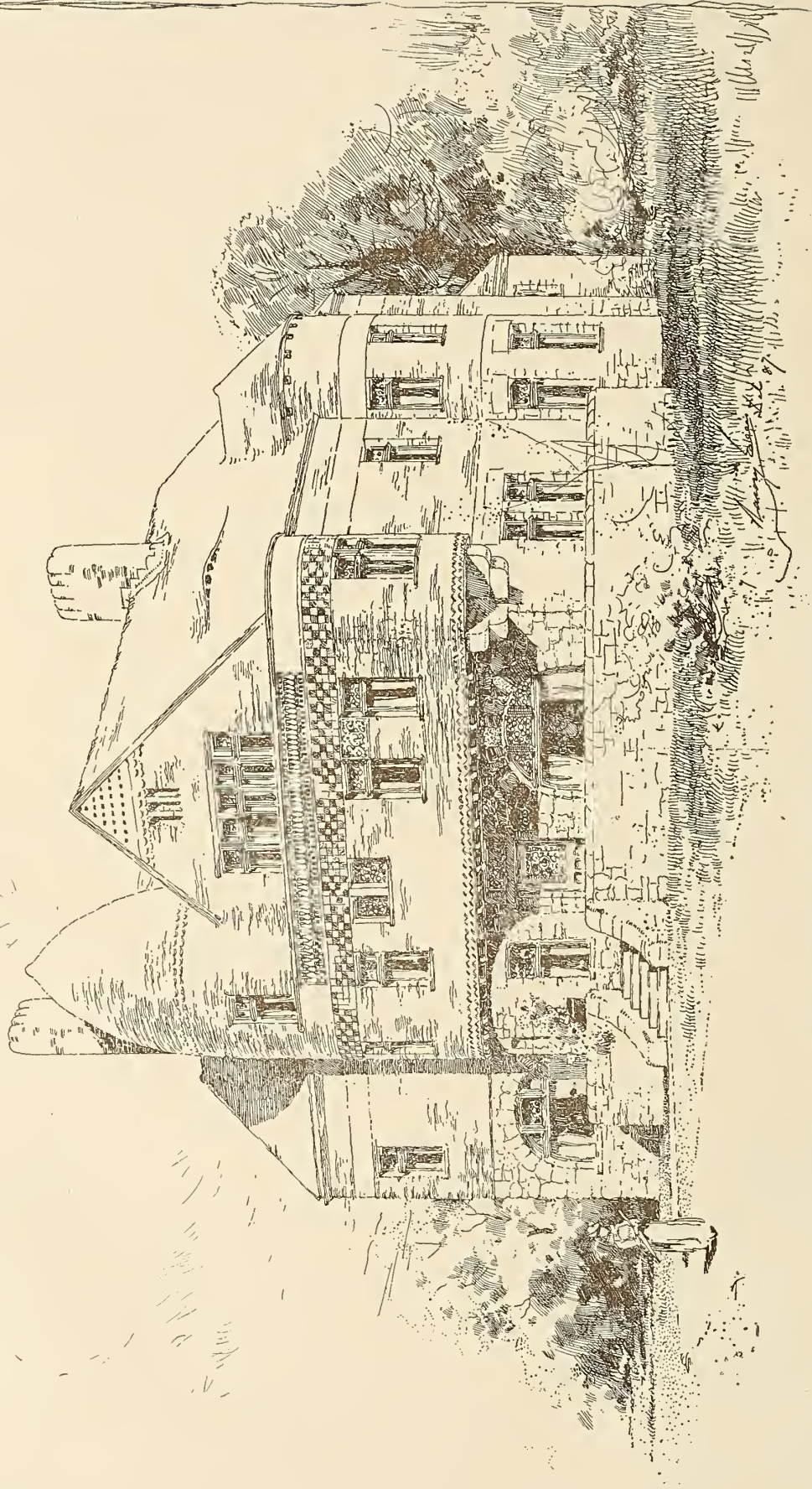
STUDIES FOR RESIDENCE FOR J. L. LOMBARD, KANSAS CITY, MO.

BURNHAM & ROOT, ARCHITECTS, CHICAGO.



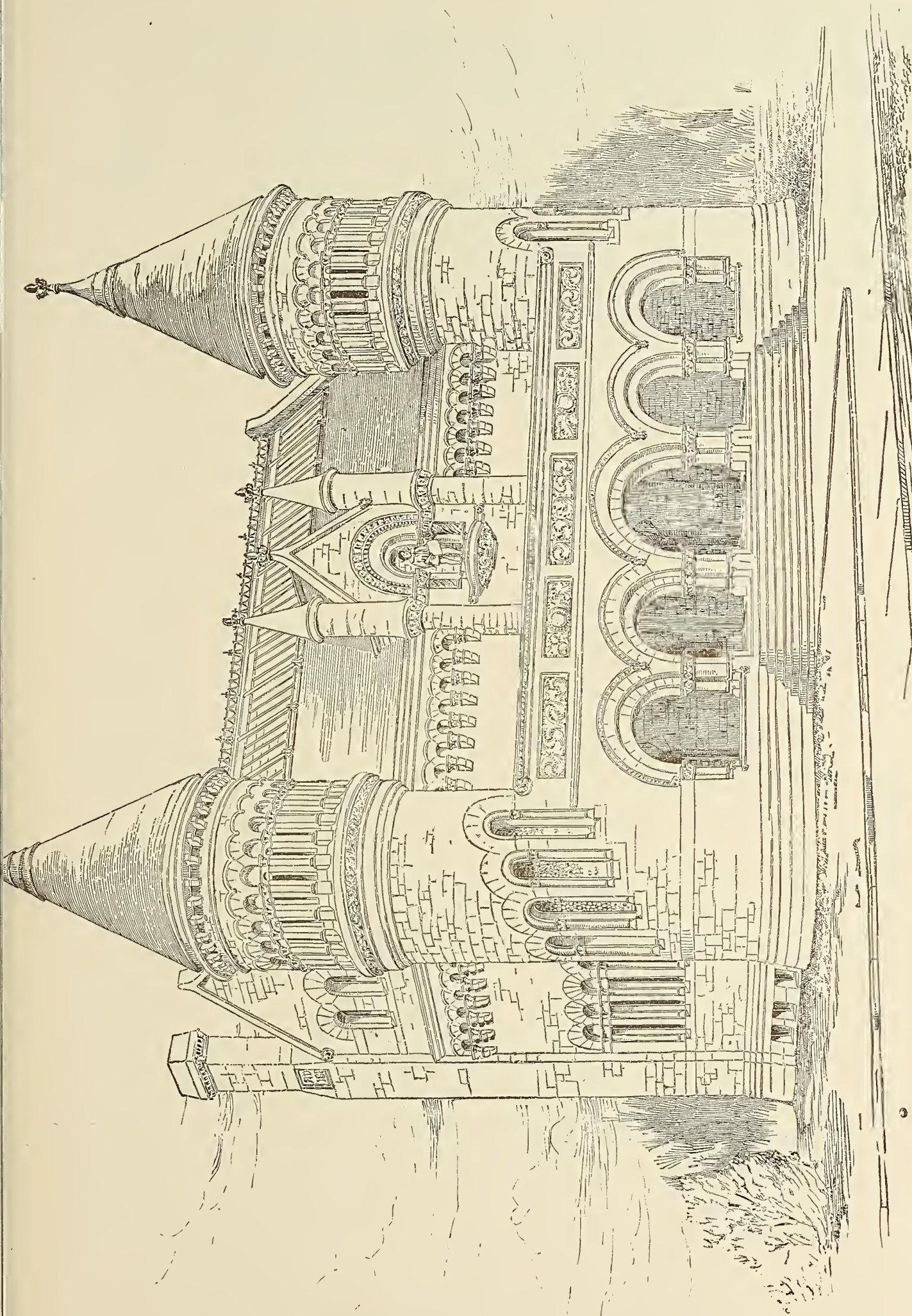
“THE TALCOTT,” OBERLIN COLLEGE, OHIO.
FRANK O. WEARY AND GEO. W. KRAMER, ARCHITECTS, AKRON, OHIO.

L. S. BUFFINGTON ARCHITECT
MINNEAPOLIS MINN. 1887.



RESIDENCE FOR FRANK E. LITTLE, MINNEAPOLIS, MINN.

L. S. BUFFINGTON, ARCHITECT.



DETROIT MUSEUM OF ART
James Balfour Archib. Hamilton Ont.

L. S. BUFFINGTON ARCHITECT
MINNEAPOLIS MINN. 1887



RESIDENCE FOR FRANK E. LITTLE, MINNEAPOLIS, MINN.

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DETROIT MUSEUM OF ART
James Balfour Archt Hamilton Ont.



Entered at the Postoffice at Chicago as second-class matter.

A MONTHLY JOURNAL (WITH AN INTERMEDIATE NEWS NUMBER AND A PHOTO-GRAVURE EDITION) DEVOTED TO WESTERN INTERESTS.

VOL. X.

CHICAGO, AUGUST, 1887.

No. 2

INTERMEDIATE NEWS NUMBER,

DEVOTED TO

ASSOCIATION AND BUILDING NEWS.

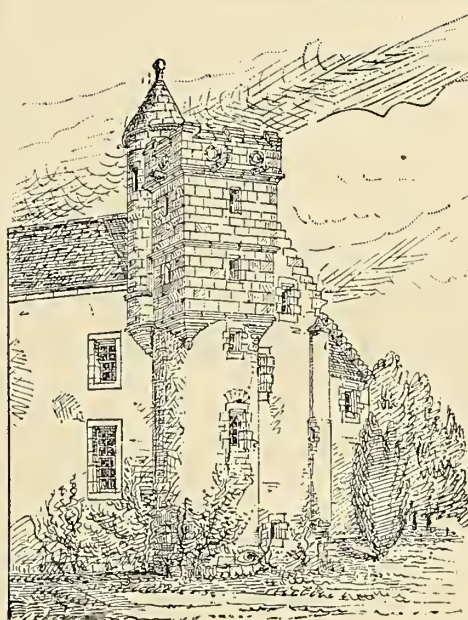
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CHICAGO, ILL.

THAT competitions are slowly but surely feeling the change for the better, that the association movement is making in professional ethics is shown by such circulars as that just received from a committee appointed by the vestry of the Grace Church, of Kansas City, of which the Rev. Cameron Mann, D.D., is rector. While comparisons are odious, it is impossible to forget that Cincinnati, with the example of her successful board of trade competition fresh in the people's minds, hazarded the designing of a city hall to the stereotyped "lottery" competition, though by "luck rather than good management" they secured a reputable and competent architect to undertake the work. The competition for the Kansas City Board of Trade was so eminently successful that the code under which it was conducted has been adopted in several important competitions since, and now the Grace Church people look to it to secure them the best architectural talent this country can produce in the erection of an edifice for their use. The proposition is to erect a church with adjacent chapel and rectory, at a cost not exceeding \$117,000. The committee, of which F. E. Tyler, 622 West Seventh street, Kansas City, is secretary, and from whom copies of the circular can be obtained, have invited Architects Cyrus W. L. Eidlitz, of New York; McKim, Meade & White, of New York; Burling & Whitehouse, of Chicago, and Adriaance Van Brunt, of Kansas City, to prepare preliminary designs to be submitted in competition, each to receive \$200. The committee will also receive designs from other architects, and consider them upon the same basis as those specially invited, but without the monetary consideration, only pledging itself that all designs will remain the property of the author and be returned to him, and neither shown to other competitors or the public. Nothing is said in the circular about an expert adjudicating committee, which, if intentionally omitted, is a bad defect in an otherwise extremely fair competition.

Building Materials.



THE August number of the *Journal of the Society of Arts*, London, England, contains a very interesting lecture by W. Y. Dent, F. C. S., F. I. C., the second of a series on building materials in which the subject of stone, artificial stone, and terracotta is fully discussed. Space prevents the reproduction of this excellent paper in its entirety, and compels a reference to the mere salient points. Laying down the premises that stone used for building purposes belong to the earlier geological formations, such as granite, and of those belonging to sedimentary formations, the lecturer proceeded to

discuss, in this paper, the stones of the latter class under two heads, sandstones and limestones. In treating of the sandstones he draws attention to the products of the several English quarries, and in the instances of their use in the several notable buildings of the country, pointing out, in the great variety of this class of stones, those fitted for tooling and such as are only fitted for foundation work, the former known under the general term of freestone, a term equally applied to the limestones. After showing the durability of this stone as a building material, as in the Craigleith stone, the permanent character of which has been thoroughly established by an exposure to the weather for two hundred years with scarcely any effect upon it, the lecturer lays down in the selection of sandstones as an important consideration uniformity of texture, inasmuch as some of this class contains portions differing in character from the mass of this stone, showing a tendency to weather at a different rate, leaving excrescences, while in other cases they weather more rapidly and the stone presents a more or less pitted appearance.

On the subject of limestones, he remarks they are quite equal in importance to the sandstones, as regards the number and variety of the beds, yielding excellent material for building purposes, ranging from white marble, which is pure carbonate of lime, to the magnesium limestone. After rehearsing the product of numerous quarries, he remarks: "The most important of the building stones belonging to the oolite system is undoubtedly that which is known as Portland stone, which has been extensively used in the public buildings of London—St. Paul's Cathedral, Somerset House, the National Gallery, Custom House, Post Office, Royal Exchange, etc., by which experience it has proved one of the best for resisting the baneful influences of a town atmosphere. In its use great care has been exercised in preventing any inferior stone being employed. Sir Christopher Wren had the stone for St. Paul's Cathedral quarried and exposed to the air for three years before it was brought to London, a full opportunity being thus afforded for rejecting any blocks that exhibited signs of inferiority; the stone used for the Royal Exchange also underwent a special inspection at the quarries."

Says the lecturer, in speaking of magnesian limestone: "Notwithstanding all that has occurred in connection with the defective condition of many portions of the building at Westminster, cannot be regarded as an

erroneous one. * * * It was, in the opinion of Sir Christopher Wren, only inferior to Portland, and examples are not wanting which afford evidence of its capability of bearing exposure to such an atmosphere as that of London without injury. * * * The nearer the composition of the stone resembles that of the true dolomite, and the more crystalline its character, the better building stone it is likely to prove."

In the selection of stone for building purposes, the lecturer alleges: "In examining a specimen of stone, our first inquiry would naturally be directed toward ascertaining its chemical composition, so far, at all events, as would be requisite for deciding upon the class to which it belongs, whether it is a sandstone or a limestone, or partakes of the character of both. Having determined this point, we should ascertain the condition in which its constituents exist, whether crystalline or otherwise, and proceed to a careful examination of its physical properties generally, such as its hardness, density and strength, and also its porosity, as shown by the amount of water it will absorb. It is upon these physical properties that the value of a stone mainly depends, for we find sandstones containing very nearly the same amount of silica, or limestones containing the same proportions of carbonate of lime, and yet differing widely from each other in their relative value for building purposes, their durability or otherwise being mainly dependent upon their physical structure."

"In conducting an investigation of this nature, the examination of sections of stone under a microscope will afford much useful and valuable information as to the nature and character of the minerals of which it is composed. As regards the more practical tests, it is very desirable, if not absolutely essential, that they should be conducted in as uniform manner as possible, otherwise the results obtained are no longer capable of being compared with each other, and consequently lose much of their value."

* * * * *
"Samples of stone from the same quarry, and sometimes even from the same bed, in which no practical difference can be detected by chemical analysis, will not infrequently be found to exhibit considerable variations in physical structure, a knowledge of which can only be obtained by actual inspection of the stone *in situ*."

"* * * Time should be allowed for what is termed 'quarry water' to dry out, by which the surface of the stone is hardened, and the tendency of pieces to split off, so frequently exhibited by newly quarried stone, especially in frosty weather, decreased. * * * Artificial drying is too rapid to allow the matter deposited to assume such a crystalline as results from the slow drying effected by simply exposing it to air. Moreover, such artificial drying may have an injurious effect on account of giving rise to unequal expansion and contraction of the surface of the stone as compared with the moist interior."

That part of the lecture devoted to the preservation of stone in walls, artificial stone, and terra-cotta, as building utilities, space precludes any extracts or observations.

Correspondence.

Editors *Inland Architect*:

ST. LOUIS, July 7, 1887.

In your June number I notice an interesting account of a "new method" of placing by columnar support the lower portion of a division wall. The method described was successfully used by me about a year ago at the Lindell Hotel, of this city. The exigencies of the occasion impelled me to devise a method of doing the work required without resorting to the usual one of needling and underpinning.

In order to enlarge the hotel bar, it became necessary to remove the first story of a heavy division wall, supporting six floors and roof. The wall to be removed was about 56 feet in length, and, with the floors above, weighed about 400 tons. Three columns and four arches were to replace the wall, throwing about 100 tons on each column.

The needling and underpinning method would have interfered too seriously with the business of the room which was, necessarily, to be kept going.

While the general idea of the method in the two cases was the same, there were differences of detail in the execution.

Instead of I beams, as used by Mr. Baumann, I used castiron arches, made in two sections. The columns were provided with solid screw backs to receive the arches, which were bolted to the columns. The columns were extended up above the arch abutments and about level with the crown of the arch. They were capped with a strong bearing plate, about 3 feet long, bracketed from the column, the object of which was to take the greater part of the weight of the wall direct on to the column, and make the column act in the place of shoring and needling.

The cut made in the solid wall for each column was only of sufficient width to permit the adjustment of the column and its cap plate. The space over the cap plate of the column was then carefully filled in with brick and cement and tightly wedged.

The foundation consisted of a large flat stone, carefully bedded on the stone wall beneath. Of the character and capacity of this wall I had accurate knowledge. The columns being set, they served as a solid underpinning.

After this the wall was cut out for the castiron arches, one-half at a time, the space over the arch being filled and wedged after each section was set. When the arches were set, the remaining portions of the wall were removed, leaving the two rooms thrown into one.

The operation was a complete success. There had been no vacation of the rooms above, and not the slightest disturbance was caused to the upper wall.

The method was so simple, and worked so easily and expeditiously, that it seemed the most natural way of accomplishing the object.

I was surprised that you should have mentioned the method as new. If constructors generally, together with Mr. Baumann, so regard it, I desire to establish my claim to the honor of priority in its use.

Very respectfully,

THOS. J. FURLONG, *Architect*.

Association Notes.

MASTER STONECUTTERS' ASSOCIATION.

At a meeting of this association, August 12, after the usual order of business a very pleasant surprise was inaugurated by the chair, who stated that the association had been honored by the elevation of one of its members to the mayoralty of the city of Lake View. That fortunate gentleman, Mr. Wm. Boldenwick, was then called for, and was presented with a valuable and beautifully designed tea service in solid silver. The surprise was complete, and Mr. Boldenwick, who has always been a prominent member of the association, ready to defend or to promote measures, the wisdom of which have been proven by the high position the association has long occupied among associations of contractors, was for the first time unable to express himself. That he appreciated the honor conferred by his association by this testimonial none doubted.

Mr. Boldenwick was the first secretary of the Association of Master Stonecutters of Chicago. Upon the conversion of the town of Lake View, where he resided, into a city, so great was his popularity that his name headed both tickets, without regard to party, and his unanimous election has given to that new city a strong, honorable and judicial head, that will as strongly contrast the action of its council with that of Chicago as the association he has done so much to foster is in advance of others.

The meeting broke up in a storm of congratulations from Mr. Boldenwick's many friends, all of whom wish him success in his important office.

CHICAGO ARCHITECTURAL SKETCH CLUB.

At the meeting of August 15, the club was entertained by a paper entitled "Comparison Between Ancient and Modern Architecture," by Mr. O. C. Christian, followed by a general discussion.

The following decision of the adjudicating committee upon the stained glass competition was received:

CHICAGO, July 30, 1887.

W. G. Williamson, Sec. C. A. S. C.:

DEAR SIR,—The result of the stained glass competition is as follows: "Villain" (W. G. Williamson), first; "Sienna" (F. L. Linden), second.

The church gable and belfry competition: "Jay" (O. C. Christian), first; "In Haste" (T. O. Fraenkel), second.

Nothing about stained glass competition is phenomenal except "Villain." This design, if not made by a professional glass designer, is extraordinarily good, very unusual in fact.

JOHN W. ROOT,
Chairman of Committee.

The following letters have been exchanged between John W. Root (at whose suggestion the Press Club monument competition was made) and the president of the Press Club:

CHICAGO, July 20, 1887.

G. W. Williamson, Sec. C. A. S. C.:

DEAR SIR,—The inclosed note is, after long delay, received from Mr. James W. Scott, President of the Press Club, in relation to the monument competition. As I understand it, the delay has been occasioned by some failure in receiving the deed of the lot on which the monument was to be erected, but I understand from a personal conversation with the Press Club that the matter is in the way of final settlement very shortly.

Yours truly, JOHN W. ROOT.

Mr. John W. Root:

MY DEAR SIR,—Will you please convey to the Sketch Club the thanks of the Press Club of Chicago for the drawings of designs for a monument to be erected in Mount Hope Cemetery. All the sketches were exhibited in our club rooms, and drew forth unqualified praise. We are in hope that we can soon erect a monument from the design selected by your committee, and I hope shall then have a better and closer acquaintance with at least one member of your club.

Very truly yours,
JAMES W. SCOTT,
President the Press Club of Chicago.

At a later meeting of the Press Club, the monument matter was laid aside indefinitely.

Mosaics.

THE cuts used in this number are reproduced from the "Edinburgh Architectural Association Sketch Book."

THE Lundie concrete and cement mixer, in claiming an economy and perfection of mixture hitherto unattained, calls the attention of interested parties to the Concrete and Cement Mixer (protected by letters patent) now used in construction of Jackson street (Chicago) bridge piers, under the direction of John Lundie, of the department of public works, Chicago.

THE James Lick monument to Francis Scott Key, the author of "Star Spangled Banner," by the American sculptor, W. W. Story, will be erected at San Francisco this month. It is fifty-one feet high and carved in Tufaceo marble. The bequest of Mr. Lick is \$60,000. A cut of the monument is given in the first number of the *Pacific States Illustrated Weekly*, a new home journal just issued at San Francisco.

THE *Scientific American* reports that: In the United States Circuit Court for the first circuit, at Boston, Colt, J., a final decree for an infringement and accounting was entered on the third Monday of February last, in the suit of the Bridgeport Wood Finishing Co. vs. Asahel Wheeler, in equity. This decree affirms the validity of the Wheeler patent, and restrains infringement thereof by the use of ground silex in wood fillers.

THE equipment of the new Rock Island lines, extending into Kansas and Nebraska, is being added to by the building of thirty splendid coaches to be placed in the southwestern passenger service. The interiors are furnished in birdseye maple and cherry, while the outsides are of a similar color and finish to those used on the main line. The seats are large and elaborately upholstered, while the windows are two and a half feet wide by three and a half long, the glass being of French plate and one solid piece to each window.

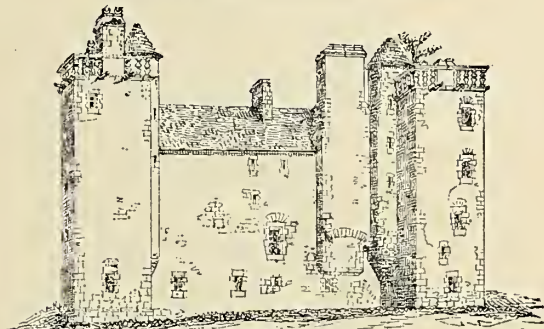
IN "As You Like It," Act II, Scene 4, "travelers must be content," is laid down as a principle. Travelers will be content if they travel over the new line of the Burlington Route, C. B. & Q. R. R., to St. Paul or Minneapolis, from either Chicago, Peoria, or St. Louis. Over it a double service of through trains is run, making as fast time as is made over any other line between the same points. The new and elegant equipment composing these trains, which was constructed especially for service on this new line,

includes Pullman Sleepers, "Burlington Route" Dining Cars, and comfortable Passenger Coaches. From both Chicago and St. Louis, through Coaches, Dining Cars and Sleeping Cars are run; and from Peoria connection is made at Rio with the through equipment from St. Louis. For tickets, rates, and general information concerning the "new line" to St. Paul and Minneapolis, via the Burlington Route, call on or address any Ticket Agent of the C. B. & Q. and connecting railroads, or PAUL MORTON, G. P. & T. A., Chicago.

THE Wisconsin Central Line is now running through Pullman sleepers from Milwaukee to Duluth, leaving Milwaukee daily at 6:00 P.M. Duluth passengers leaving Chicago on the 3:00 P.M. train will be provided with seats in the Minneapolis sleeper from Chicago as far as Rugby Junction, where they can take the Duluth sleeper at 6:55 P.M., arriving in Duluth the next day at 12:45 P.M. Accommodations in the Duluth sleeper can be secured at the city ticket office, 205 Clark street, Palmer House, Grand Pacific and depot, corner Polk street and Fifth avenue.

THE Pioneer Fireproof Construction Company report a demand for fireproofing on the increase, and are running their factory night and day in order to keep up with orders. During the last few months they increased their plant by the addition of eight 24 foot diameter kilns, making a total of twenty two kilns in all at their factory in Ottawa. The general manager of the company reports having closed contracts during the past ninety days for the complete fireproofing of the following buildings: Ramsey County Court House, St. Paul, Minn.; Spalding Hotel, Duluth, Minn.; Kieth & Perry building, Kansas City, Mo.; State Capitol building, Topeka, Kas.; Paxton office block, Omaha, Neb.; First National Bank building, Omaha, Neb.; Caldwell Bank building, Omaha, Neb.; Schoenhofen Brewing Company building, Chicago. They also report having secured the contract for the erection of the new factory building for the Western Cottage Organ Company, at Ottawa, Illinois. This building will be 60 feet wide with a frontage of 400 feet. The outside walls will be built of smooth-glaze fire-clay blocks, laid up in regular courses, with pilasters every 16 feet. Sills, caps, water-tables and belt courses will be made of tile, and molded in ornamental shape and variegated colors. This building marks an era in the construction of factory buildings, and the company propose to push this branch of their business into general use. The chimney stack for the company will be eight feet in diameter and ninety feet high, built of highly glazed tile blocks, on a principle introduced by Mr. Johnson, in the construction of all the chimneys of the Fireproof Company's works at Ottawa. The foregoing contracts aggregate in value \$240,000.

Synopsis of Building News.



DUNTARVIE CASTLE.

Ann Arbor, Mich.—Architects Pond & Pond, of Chicago, Ill., have just completed plans and specifications for a physical and hygienic laboratory building for the University of Michigan at Ann Arbor; building to be two stories, with basement and attic, 70 by 100 feet, of brick and stone; to cost, exclusive of equipments, \$30,000.

Anrora, Ill.—Architects Edbrooke & Burnham, of Chicago, report: For First Baptist Society, church building, 124 by 63 feet, Dundee light brick, with Michigan stone trimmings, galvanized iron cornices, slate roof, iron chancel, beams, etc., steam heat, stained glass; cost \$18,000; to be commenced September 1.

Burlingame, Kan.—Architect J. G. Haskell, of Topeka, reports plans being made for dwelling for Dr. W. C. Wolf; to cost from \$2,000 to \$3,000.

Canon City, Col.—Architect Geo. W. Roe reports: For Wells & DeWoody, two-story brick, stone and galvanized iron building, 44 by 80 feet; cost \$7,000; under way; G. W. Roe, builder. For Chas. Pauls, two-story brick, stone and galvanized iron building, 22 by 108 feet; cost \$4,500; under way; G. W. Roe, builder. In addition to the above there are several under way, ranging from \$800 to \$1,500. The Santa Fe Railroad has secured the right of way and will have trains running to this city; also to their coal fields, one mile from here, inside of three months. It is expected this will make a "boom" here.

Chicago, Ill.—Architects Pond & Pond, report: For Dr. H. T. Byford, two-story and attic brick and stone residence, 30 by 60 feet, corner of Thirty-third street and Forest avenue, slate roof, closets and bath, stained glass, hot air heat, hardwood finish and tiling, wood mantels, electric bells, speaking tubes, etc.; cost \$10,000.

Architect Alfred Smith reports: For John O'Neil, two-story and basement brick and stone residence, 25 by 77 feet, corner of Thirty-third street and Vernon avenue, galvanized iron cornices, hardwood finish first floor, mantels, steam heat, stained glass, closets and bath, electric bells, etc.; cost \$10,000; to be commenced September 1.

Architect W. W. Boyington reports: Alterations in Grand Pacific Hotel, including new passenger elevator; cost \$15,000; under way; Gordon & Co., carpenters. Alterations to Fidelity Savings Bank building on Randolph street; cost \$10,000; Gordon & Co., carpenters. Alterations in the Sherman House; to cost \$5,000; under way. A four-story addition to the Washingtonian Home, 54 by 104 feet, Ogden avenue and Madison street, brick and iron construction, felt roof, closets and bath, steam heat and power, passenger elevator, electric bells, speaking tubes, etc.; cost \$20,000; under way; W. A. & A. E. Wells, masons; F. H. Avers & Co., carpenters. For First Methodist Society, tower on church building, light brick, terra-cotta, galvanized iron and slate; cost \$4,000. Ground has been broken for the Kenwood Evangelical Church, corner of Forty-sixth street and Greenwood avenue, H. B. Wheeler and W. W. Boyington joint architects; cost \$45,000; contracts all let.

Architects Treat & Foltz report: For Martin Ryerson, residence; cost \$75,000. For Thomas Chalmers, residence; cost \$40,000. For Mrs. Dr. Papin, alterations, etc.; cost \$30,000. For Dr. E. J. Gardner, residence; cost \$3,000. For Dr. F. L. Wadsworth, residence; cost \$15,000. For Mrs. E. J. Aldrich, two residences; cost \$18,000. For J. J. Simmons, two residences; cost \$13,000. For John Coughlin, flat building; cost \$3,000. For F. H. Watriss, two dwellings; cost \$6,000. For M. Murphy, dwelling; cost \$5,000. For the American Express Co., freight house; cost \$16,000. For the "Fair," alterations, etc.; cost \$30,000. Alterations in American Express Building; cost \$6,000. Addition to building for the Western Electric Co.; cost \$65,000. Alterations, etc., in New England Church; cost \$12,000. Office fittings, etc., for Franklin

MacVeagh & Co.; cost \$4,000. For Geo. B. Carpenter & Co., five-story warehouse, 50 by 100 feet. Contracts let for addition to Illinois Training School for Nurses; cost \$20,000.

Architect S. S. Beman has just let contracts for a ten-story building, 40 by 184 feet, to be erected on Adams street adjoining the Home Insurance Company's building, for the Western Edison Electric Light Company. The building will have a front of pressed brick and stone and will be entirely fireproof. The company purchased the Taylor building, on Monroe street, near La Salle, some weeks ago, with the view of remodeling it for its use, but since have regarded that course as impracticable. The company has secured a long lease of the ground upon which the new building will stand. The same architect has also planned a large office and factory building for the Murphy Varnish Company, to be erected at the corner of Dearborn and Twenty-second streets. The fronts will be of pressed brick and brownstone, and will cost about \$75,000. [This item was erroneously credited to Architects Burnham & Root in the Chicago Tribune, Sunday, August 21.]

Architects Thomas & Rodger report: For D. Pyott, on the northwest corner of Ashland avenue and Harrison street, five three-story dwellings, rock fronts of brownstone; to cost \$50,000. For I. M. Pyott, a block of stores and flats on West Van Buren street, near Loomis, rock fronts of brownstone, projecting bays of copper, etc.; cost \$22,000. For W. Johnson and William Mavor, thirteen two-story and attic dwellings, seven being on Bowen avenue and six on Forty-second street, of varied design; cost \$43,000. For I. E. Mollar, on Paulina street, three-story flats; to cost \$6,000. For J. W. Ela, residence on Scott street, near Astor, three-story, St. Louis pressed brick front, copper bays, etc.; to cost \$6,000. For M. Ferris, residence on Scott street, three-story, St. Louis pressed brick front, hardwood finish, etc.; to cost \$6,000. For I. M. Lamble, at Toledo, O., two-story addition to the Chamber of Commerce; to cost \$30,000.

Architect R. G. Pentecost has just let contracts for two residences for Mrs. M. L. Barmore, to be built on Grand boulevard, near Fortieth street. They will be of pressed brick, trimmed with Michigan sandstone. Also, just commenced, the construction of a nice residence for Justice C. J. White, on the north side of Jackson street, near Throop, of pressed brick and Michigan stone. Completed plans for a three-story flat building for Mrs. Morris, on West Polk street; to cost \$10,000.

Architect H. R. Wilson has planned for W. H. Thomas a four-story block of stores and flats, to be built at the corner of Lincoln and Garfield avenues, at a cost of \$45,000. The improvement will be opposite that made for the same owner last year.

Architects John Woollicott & Son report: Work has been commenced on the Fullerton avenue Presbyterian church. The edifice will occupy the northeast corner of Fullerton avenue and Larrabee street.

Architect S. V. Shipman has let contracts for a block of two-story dwellings for A. M. Fuller, on West Monroe street, near Lincoln; the fronts will be of pressed brick and Bedford stone; cost, \$20,000.

Architect L. B. Dixon has let contracts for three stone-front houses to be erected on Grand boulevard; they will cost \$45,000.

Columbus, Ga.—Architect Frank J. Dudley reports: The building business was never better, and the outlook is very encouraging. From indications the winter months will not suspend building operations. For E. Philips, two-story frame, 25 by 90 feet; cost \$3,620; under way. For John Johnson, two-story frame, 29 by 90 feet; cost \$3,500; under way. For John Saunders, two-story frame, 26 by 51 feet; cost \$2,400; under way. For R. J. Hunter, two-story frame, 28 by 60 feet; cost \$2,500; under way. For Dr. N. J. Banks, improvements frame dwelling; cost \$3,800; under way; Harvey & Dudley builders of all the above. For St. James' M. E. Society, brick and stone church building, 40 by 70 feet; cost \$6,500; under way; improvements cost \$6,300. For T. J. Mickolls, two-story brick store building, 45 by 111 feet; cost \$6,500; not let. For A. & M. College, four-story brick and stone building, 70 by 160 feet; cost \$70,000; not let. Other drawings in preparation, a number of houses of less importance.

Detroit, Mich.—Architect Jos. E. Mills reports: For Wm. A. Adams, a two-story brick residence, with stable, stone trimmings, slate roof, ornamental galvanized iron work, 30 by 57 feet; cost, \$10,000; under way; Lutz & Sielaff, builders. For H. L. Bassett, two-story brick residence, stone trimmings and tin shingles, 30 by 56 feet; cost, \$3,500; under way; W. H. Morse & Co., carpenters; Dietrich Bros., masons. For August Kirchner, two-story brick residence, stone trimmings, gravel roof and plate glass, 20 by 60 feet; cost, \$3,500; under way; Dietrich Bros., builders; also dwelling to cost \$5,000; projected.

Galveston, Tex.—Architect N. J. Clayton reports: Condition good; outlook fair. For Walter Gresham, two-story and basement and attic stone residence, rock-faced, ashlar work; cost, \$80,000. For Geo. Sealy, two-story and basement and attic residence, rock-faced, ashlar pressed brick and terra-cotta; cost, \$75,000. The first of the above will be built entirely of San Jacinto sandstone, with tile roof, while the latter will have basement of the same stone with buff brick and terra-cotta superstructure, buff tile roof; both are under way; John F. Hart, contractor. For Rev. Fr. O'Connor, S. J., Sacred Heart Church, brick building; cost, \$35,000; projected. For Rabbi Silverman, improvements on two-story brick building, slate roof; cost, \$8,000; under way; Harry Devlin, builder. For Geo. Seelgion, two-story and attic frame residence, slate roof; Treacan & Yeager, builders. For Dr. H. P. Cooke, two-story frame residence; cost, \$6,500; under way; Kissinger & Divine, builders. For Galveston county, jail, almshouse and asylum, at Clear Creek, frame buildings; cost, \$5,000; under way; Frank Jones, builder. In connection with the above, the foundation of the United States custom house, postoffice, etc.; building has commenced; building is to be three-stories with basement, tower 140 feet high, 90 by 150 feet, red pressed brick with red sandstone and terra-cotta trimmings, red tile roof, fireproof construction; N. J. Clayton, superintendent of construction.

Geneseo, Kan.—Architect L. M. Wood, of Topeka, reports: Schoolhouse, to cost \$8,000.

Girard, O.—Architects Owsley & Boucherle, of Youngstown, report: Brick, stone and terra-cotta school building, 40 by 80 feet; cost \$15,000; under way.

Jefferson, O.—Architects Owsley & Boucherle, of Youngstown, report: Brick, stone and terra-cotta school building, 40 by 80 feet; cost, \$13,000; projected.

Little Rock, Ark.—The Union Cotton Compress Company will erect a building, to cost \$100,000. C. F. Martin & Co., cotton warehouse; cost, \$5,000; Orlopp & Kusener, architects; Noah Hamlet, builder.

Lyons, Kan.—Architect L. M. Wood, of Topeka, reports: For C. W. Ewans, brick business block; 200 feet frontage, cost, \$45,000; two school houses, to cost \$12,000.

Mercer, Pa.—Architects Owsley & Boucherle, of Youngstown, Ohio, report: For Miller & Gordon, brick and stone store building; cost, \$15,000; under way.

Middlefield, Ohio.—Architects Owsley & Boucherle, of Youngstown, report: Brick and stone town hall; cost, \$15,000; under way.

Minneapolis, Minn.—Architect T. D. Allen, reports: School buildings at Prescott, Wis.; cost, \$15,000; school building, at Hndson, Wis.; cost, \$20,000; school building, at Stillwater, Minn.; cost, \$30,000; school building, at Kasota; cost, \$4,500; school building, at Hutchinson; cost, \$12,000; school building, at Wayzata; cost, \$5,000; school building, at Perham; cost \$7,000; school building, at Taylor's Falls; cost, \$4,500; court house, at Lawrence, Rock county; cost, \$25,000; court house, at Devil's Lake; cost, \$18,000; all of the above are in course of construction.

Monmouth, Ill.—Architect Jos. E. Mills, of Detroit, reports: School building, two-story, brick, stone trimmings, galvanized iron cornices, slate roof, 98 by 129 feet; cost, \$40,000; under way; Wm. Mallen, Peoria, Ill., builder.

Monroe City, Kan.—Architect J. G. Haskell, of Topeka, reports: Plans being made for three-story business block, 51 by 80 feet; cost, \$12,000; first story to be occupied by bank and store; second-story by an association; third story, Masonic Hall.

Rochester, Ind.—Architect Jos. E. Mills, of Detroit, reports: School building, two-stories, brick and stone trimmings, with slate roof, 74 by 96 feet; cost, \$18,000; under way; Jno. Clifton & Co., Peru, Indiana, builders.

Salem, Mich.—Architect Jos. E. Mills, of Detroit, reports: For Baptist church, a veneered building, stained glass and natural wood finish, 45 by 50 feet; cost, \$3,800; under way.

Salt Lake City, Utah.—Architect R. Kletting reports: Present condition and outlook good; many small buildings, and about a dozen to cost over \$10,000 are under way; prospects for next year good; for Kinney & Gourly, two two-story stone front residences; cost, \$7,000; drawings under way; also lumber depot; cost, \$2,000.

Springfield, Ill.—Architect W. W. Boyington, of Chicago, reports: Repairs on Lincoln monument, brick and granite work; cost, \$15,000; for C. L. Lawrence, two-story and cellar and attic frame residence, 35 by 60 feet, closets and bath, hot air heat, stained glass, mantels, hardwood finish and tiling, electric bells, speaking tubes, etc.; cost, \$9,000; to be commenced September 1; for C. W. Chatterton, repairs, etc., to

Opera House, including new slate roof; it will be remembered that the roof of this building fell in recently.

Topeka, Kan.—Architect L. M. Wood reports: For W. Klingman, residence: cost \$8,000. A. O. U. W. building, 100 by 150 feet, five stories high, to be built of stone; fireproof, and thoroughly first-class; cost \$150,000.

Toronto, Ont.—Architect E. J. Lenox reports: The indications for building trade were good this year, but, on account of strikes, business has been cut off about fifty per cent. For Ontario Medical Council, five-story building, 96 by 87 feet; first and second stories cutstone, above that brick and terra-cotta trimmings; cost \$70,000; under way; L. York, mason; T. Gearney, carpenter. For H. Bealy, brick and cutstone residence, 60 by 45 feet; cost \$17,500; taking bids. For T. Milburn, four-and-one-half-story warehouse, 110 by 74 feet; brick, stone and terra-cotta; cost \$40,000; F. Jackson & C. Boon, builders. For Warwick & Co., four-and-one-half-story cutstone, brick and terra-cotta building, 200 by 32 feet; cost \$41,000; Roberts & Jones and — Downey, builders. For A. McMurchey, two-and-one-half-story brick and cutstone residence, 56 by 30 feet; cost \$6,500; Roberts & Jones and — Dickie, builders. For Iredale estate, three-story cutstone and brick store building, 75 by 17 feet; cost \$5,800. For R. J. Stanley, three-story brick residence, 58 by 22 feet; cost \$3,700. For Congregational Society, Sunday-school rooms, three stories, 100 by 36 feet, cutstone; cost \$21,000; taking bids. For M. E. Society, one-and-one-half-story Sunday-school building, 110 by 40 feet; cost \$8,000; under way. Preparing plans for Toronto municipal and county buildings, three-and-one-half stories, cutstone, 280 by 260 feet; cost \$1,000,000. It is not yet decided if the building will be fireproof or not. For J. Morrison, four-story brick factory building, 74 by 70 feet; cost \$12,000; under way.

Waco, Texas.—Architects Larmour & Herbert report: Present condition and outlook for building business is unusually good, and with a good cotton crop Waco will lay in walls at least 8,000,000 brick before January 1, 1888. For city of Waco, three-story brick and stone city hall building, 71 by 103 feet, metal roof; cost \$55,000; ready for bids. For A. Hinchman, two-story brick and cutstone residence, 41 by 78 feet, slate roof; cost \$13,000; under way; J. C. Cavender, builder. Farmers' National Bank building, 26 by 90 feet, brick and terra-cotta, metal roof; cost 12,000; ready for bids. For W. A. Wilson, frame residence, 31 by 47 feet, metal roof; cost \$5,000; ready for bids. For Hawkins & Co., at Vallas, two-story brick and stone store building, 50 by 125 feet, metal roof; cost \$18,000; projected. For Patty & Brockerton at Hillsboro, two-story brick and iron store building, 50 by 100 feet, metal roof; cost \$10,000; under way. Also fine storehouse, 25 by 100 feet, in Hillsboro, and a school-house at McGregor, two-story brick and stone, metal roof; cost \$12,000.

Warren, O.—Architects Owsley & Boucherle, of Youngstown, report: For J. A. Fuller, frame residence; cost, \$6,000; under way. For W. K. Siles, frame residence; cost, \$5,000; under way. Park Hotel, three-story, brick, stone and terra-cotta building; cost, \$30,000; under way.

Youngstown, O.—Architects Owsley & Boucherle, report: For Misses L. & E. Wick, three-story stone front store building, 46 by 150 feet; cost, \$32,000; under way. For Messrs. Gilman & Wilson and Folsom & Thayer, brick, stone and terra-cotta store building, 60 by 100 feet; cost \$20,000; under way. For H. K. Wick, log cottage, 25 by 50 feet, hardwood finish, tile roof; cost, \$5,000; projected. For T. Nielson, frame residence, 40 by 52 feet, hardwood finish, slate roof, all improvements; cost, \$6,000; projected.

PROPOSALS.

HOSPITAL REPAIRS.

[At Brooklyn, N. Y.

NAVY DEPARTMENT,
BUREAU OF MEDICINE AND SURGERY,
WASHINGTON, D. C., August 3, 1887.

Sealed proposals, indorsed "Proposals for Repairs at Naval Hospital, Brooklyn, N. Y.," will be received at the Bureau of Medicine and Surgery, Navy Department, Washington, D. C., until Saturday, Sept. 3, 1887, at 11 A.M., when they will be publicly opened, for repairs to roof, skylights, etc., at Naval Hospital, Brooklyn, N. Y.

Blank proposals with specifications and all necessary information can be obtained from the medical officer in charge of the hospital.

The right is reserved to reject any or all bids.

W. K. VAN REYPEN,
Acting Chief of Bureau.

NOTICE TO CONTRACTORS AND BUILDERS.

Sealed proposals will be received at the office of the Superintendent of Public Schools, Birmingham, Alabama, for the entire construction and completion of a school building to be erected in said city, until 12 o'clock noon of Tuesday, the 18th day of October, 1887, the building to be of brick, with stone trimmings, three stories high, containing fifteen schoolrooms and to be 108 by 76 feet.

Plans and specifications may be seen at the office of the Superintendent of Public Schools, Birmingham, Alabama, or at the office of the architect, S. J. Hall, 30 E. First avenue, Columbus, Ohio.

Bond to the amount of the contracting sum will be required.

The Building Committee reserves the right to reject any and all bids.

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PROPOSALS.

PUBLIC BUILDINGS, KANSAS.

Sealed proposals, in triplicate, subject to the usual conditions, will be received at this office until 2 o'clock P.M., Friday, September 9, 1887, at which time and place they will be opened in the presence of bidders, for the construction at Fort Riley, Kan., of the following described public building, of stone, viz.:

One administrative building.
Four double sets officers' quarters.
Two artillery barracks.
Two artillery stables and corral walls.
Two gun sheds.
Two workshops.
Two outbuildings.

The government reserves the right to reject any or all bids, or parts thereof, and waive defects.

Blank proposals, plans, and specifications, and instructions as to bidding, terms of contract, pavements, etc., will be furnished on application to this office.

Envelopes containing proposals should be marked, "Proposals for Construction of Public Buildings for Artillery Post," and addressed to the undersigned.

GEORGE E. POND,
Captain and Asst. Quartermaster U. S. Army.
Fort Riley, Kan.

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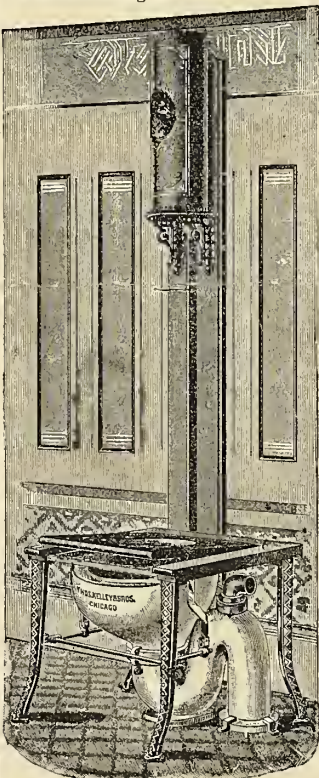
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SEPTEMBER, 1887.

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IN THE WEST.

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SECRETARY OF FOREIGN CORRESPONDENCE:
W. L. B. JENNEY, Chicago, Ill.

STANDING COMMITTEES FOR 1887.

Committee on Discipline—The Board of Directors of the Western Association.
Committee on Metric System—T. B. Annan, St. Louis, chairman; N. S. Patton, Chicago; Charles Crapsey, Cincinnati.
Committee on Uniform Contracts and Specifications—The executive boards of the several state associations to report at the next session of the Western Association.
Committee on Raising the Standard of Professional Requirements for membership—L. H. Sullivan, Chicago; I. Hodgson, Minneapolis, Minn.; George B. Ferry, Milwaukee, Wis.
Committee on Procuring Architectural Drawings and Photographs for Exhibition at the next Convention of the Western Association—The executive committees of state associations.
Committee to take charge of the Bill Governing the Office of Supervising Architect of the United States—Dankmar Adler, Chicago; D. H. Burnham, Chicago; J. F. Alexander, La Fayette, Ind.
Committee to Represent the Western Association at the next Annual Convention of the American Institute—John W. Root, Chicago, Ill.; J. F. Alexander, La Fayette, Ind.; D. Adler, Chicago.
Committee on Collection of Statistics on Competitions—C. E. Illsley, St. Louis, Mo.; Sidney Smith, Omaha, Neb.; E. H. Taylor, Cedar Rapids, Iowa; G. W. Rapp, Cincinnati, Ohio; J. F. Alexander, La Fayette, Ind.
Committee on Statutory Revision—Dankmar Adler, Illinois, chairman; Sidney Smith, Nebraska; I. Hodgson, Minnesota; J. F. Alexander, Indiana; C. H. Lee, Iowa; E. O. Fallis, Ohio; A. E. Cobby, Dakota; Chas. K. Ramsey, Missouri; J. S. Mathews, Wyoming; S. J. Osgood, Michigan; C. A. Curtin, Kentucky; E. Townsend Mix, Wisconsin.
Committee on Formation of State Associations—J. F. Alexander, La Fayette, Ind.; Chas. K. Ramsey, St. Louis, Mo.; E. H. Taylor, Cedar Rapids, Iowa; I. Hodgson, Minneapolis, Minn.; H. P. McDonald, Louisville, Ky.; Geo. W. Rapp, Cincinnati, Ohio; G. B. Ferry, Milwaukee, Wis.; Sidney Smith, Omaha, Neb.; G. W. Thompson, Nashville, Tenn.; T. Sully, New Orleans, La.; S. J. Osgood, Grand Rapids, Mich.; J. G. Haskell, Topeka, Kas.; S. A. J. Preston, Austin, Texas; Mrs. Louise Bethune, Buffalo, N. Y.
Committee on Legal Decisions Relating to Building Interests—J. J. Kane, S. A. J. Preston, N. F. Clayton, Texas; Sidney Smith, G. L. Fisher, G. W. Field, Neb.; Sidney Osgood, L. D. Grosvenor, G. W. Lloyd, Mich.; L. H. Sullivan, C. L. Stiles, Wm. Holabird, Ill.; J. W. Reed, J. F. Wing, B. Vonegut, Ind.; J. W. Yost, E. O. Fallis, S. E. Des Jardines, Ohio; J. G. Haskell, E. T. Carr, C. B. Hopkins, Kansas; E. T. Mix, D. M. Harteau, A. C. Class, Wis.; W. F. Hackney, C. H. Lee, E. H. Taylor, Iowa; F. C. Bruce, A. M. McMurphy, T. H. Morgan, Ga.; Louise Bethune, W. W. Carlin, New York; J. S. Mathews, Wy. T.; A. E. Cobby, Dakota; J. F. Cook, Cal.; C. C. Helmers, A. Van Brunt, T. B. Annan, Mo.; H. Wolters, H. P. McDonald, H. L. Rowe, Ky.; G. W. Thompson, J. F. Baumann, Tenn.; L. S. Buffington, I. Hodgson, D. W. Millard, Minn.; C. C. Helmers, St. Louis, chairman.

STATE medicine as illustrated by Dr. Oscar C. DeWolf, commissioner of health of Chicago, presents to other cities a perfection of sanitary system that is as unapproached as it is enviable. The report of the department of health for 1886, just issued, gives one hundred pages to the statistics and details of work done during the year. The department has entire control of all sanitary matters, employing ninety men in the different branches. Twenty-seven are plumbers whose business it is to inspect the plumbing and sewage systems of buildings, or the inside of houses; twenty-two are occupied in the inspection of streets, alleys, etc., or the outside of buildings, and a large part of the remainder have the health of the people as affected by meats and vegetables in their charge, a large force being on duty at the stock yards and packing houses. The offices of the board are most perfectly arranged and the records exhaustive and minute. An index book shows a record of 76,000 old houses, collected in the past three years, showing the state of the plumbing, etc., and a law went into effect last year by which every house builder is obliged to submit new plans to the board and answer a long list of questions regarding location of windows, airshafts, traps, vents, etc., and also how the building is to be occupied. This statement, with a copy of the plan, is placed on file. When the plumbing is in, and before it is covered, the owner is obliged to notify the department and if on inspection any defect is found it must be rectified. Each house so registered is subject to inspection as often as necessary, and any death from scarlet fever, diphtheria, etc., is charged up against the plan on file. All complaints from occupants of houses are registered and four days after such is made a report can be found at the health office of the condition of the house. Thirty-two thousand of such inspections were made last year. Arrangements have been made by which the city will soon be cremating its garbage by furnaces. The report of W. H. Genung, chief of inspectors, is also extremely interesting and on the whole the report of the health department is a valuable addition to the list of works upon sanitary science, and goes far toward showing that the law formulated by the department and the Illinois State Association of Architects should be passed by the next legislature.

A NEW YORK correspondent, presumably an architect, writes to *Building* in regard to the examination and licensing of architects. He assumes that "the idea has met with little general approval, nor has anything like a unanimous wish been shown on the subject." The correspondent further begs to suggest a system of voluntary examinations, etc. It seems hardly possible that there is an architect in the United States who does not know that almost two years ago the Western Association of Architects proposed and adopted a general draft of a bill providing for this, and placed it in the hands of fourteen state associations and committees in other states where no association existed, for presentation to their legislatures for passage. While the bill has not yet been passed in any state, and may not in all for years, yet every architect of real ability is anxious that the profession should receive this legal recognition. It is the only measure that will check the monstrosities in the way of public and private building that become more noticeable as the general architectural talent of the country improves and makes the defects more glaring by contrast. An examination may, and we think should be instituted by the architectural associations as a condition of membership, which, with the state law, architects are fully alive to the necessity of, and will work for its accomplishment,

THE State Soldiers and Sailors' Monument Commission of Indiana have selected as advisers in the monument competition the following gentlemen: Prof. Wm. R. Ware, of Columbia College, Prof. Jno. L. Campbell, professor of physics and engineering, Wabash College, and Gen. Thos. A. Morris, state house commissioner at Indianapolis. Prof. Campbell was secretary of the Centennial Commission, and is well known as a thoroughly scientific man and of rare culture. Prof. Morris has had a wide experience in architectural matters, is a graduate of West Point, and for ten years has been the senior member of the State House Commission. Prof. Ware, as is well known, is usually called as an adviser where an expert of unusual ability in architecture is required, and we are glad to note that our timely warning regarding the most probable result of following the plan at first proposed led the committee to seek advice from so authoritative a source. We have now great hopes for the success of the commission in building a monument the design and construction of which will be a credit to the commission and the state and a fit memorial to the heroes in whose honor it is erected.

SO far there has been no outcome to the reported find of natural gas in or near Chicago, but the agitation of this important subject has led us to an investigation into the merits of systems producing an equivalent, and we believe it can be asserted as a fact that there are several so-called water gas systems producing a fuel gas quite as cheaply as natural gas can be piped from the flowing well to the places where most needed, either to the domestic hearth or the plant of the manufacturer. Chicago and its environment is one vast manufacturing plain, and the use of our common soft coal constantly emits volumes of smoke which is proving not only to be obnoxious, but deleterious, and of a permanent injury to residence property. If our investigation leads to anything of value, it is this, that by chemical combination our soft coals can be so utilized that at a low cost we gain the equivalent to natural gas, which can be placed at the disposal of the consumer as readily as illuminating gas is now furnished, and at a cost coming within the reach of all requiring a cheap fuel. It is confidently asserted by scientists that as a heating agent the combination of hydrogen with certain chemical substances at the gas burner the resultant effect is incandescence rivaling the electric light, without its dangers and high cost. At present Chicago has not reached this economic point, but in the light of advancing sciences, there are those who believe we are nearing the point where a fuel gas and an illuminating gas may be easily and cheaply furnished from the same common source, the local gas works.

WE have received from Rome the bound volume of Proceedings of the Society of Italian Engineers and Architects, for the year 1887, a bulky pamphlet of 320 pages octavo, with an appendix of sixteen plates of engravings, some of which are large and have to be folded several times. Such a publication issued every year is an impressive evidence of the activity of architects and engineers in Italy, a country where untraveled Americans are apt to imagine that the houses are mostly hundreds of years old, and there is very little new work going up. Beside the records of society meetings and debates, there are elaborate papers on proposed modifications in the Roman Building Laws; on a plan for a Baltic canal to the North Sea, to cost \$39,000,000.00; on the shapes of equilibrium curves in arches of various forms and variously loaded, on excavation by means of compressed air, on the relation between earthquakes and terrestrial magnetism, on the design of curved roof trusses, and on a proposed new railway station

in Rome; also, on the materials of construction for first-class railways. There are fifteen pages of notes in the shape of a scientific and bibliographic review of matters home and foreign.

THE annals of the Italian Engineers and Architects not only show eminent attainments, scientific and professional, by its industrious membership, but we find that throughout the Italian peninsula architects and engineers are well organized in local associations and an admirable energy is displayed. Thus we find acknowledgment of exchange of published proceedings with societies of engineers and architects at Alexandria, Bologna, Catania, Florence, Genoa, Milan, Naples, Palermo, Turin and Trieste. Foreign publications are also acknowledged from Austria and Hungary, Belgium, Brazil, France, Germany, England, Holland, Portugal, Russia, Spain, Switzerland and the United States. The number of exchanges from the United States is greater than from any other country except France, and we will modestly add that THE INLAND ARCHITECT heads the list of American publications received in Rome.

WE have elsewhere in this issue made mention of the establishment in a western city of an "Academy of Architecture." Looking over the course of study offered we were altogether disappointed at the nature of the instruction. There are to be courses in mathematics, drawing, mechanics, surveying; courses in plan-making and in specifications, and a brief time is to be given to the history of architectural styles. This instruction is intended to be given in a practical form; all of it is of value, some of it indispensable, to an architect. But does this constitute an architectural education, and will such a training fit a young man to be an architect? Beyond a doubt not a few in the profession, and most outsiders, would answer "yes." Such a course of study honestly pursued fits a man to build, and building is architecture. This is the view of the man of business; this is the view of the architect who follows architecture for what there is in it, and who considers that he has done his duty by his client when he has planned and erected a building that will stand alone. This, in an age whose characteristic feature is the development of material resources, whose largest, at least whose most conspicuous, activities are directed toward tending to that development all that is known or can be discovered of the physical and natural sciences, this, in such an age, is a natural, perhaps a necessary view, directly in keeping with the great impulses that largely control all modern, certainly all American life. Quite likely neither this generation nor the next will see any other notion prevalent among the people generally. None the less building is not architecture; a technical training in applied science, however much it may avail in the education of engineers and constructors, will never be adequate to the education of an architect, and so long as clients are committed to this low view, and the profession permits itself to be ruled by the clientage, the architecture of this country will not be a great architecture.

IF not synonymous with building in what does architecture consist? Definitions rarely define, and the unabridged with its "art of building" does not carry us far on our way, inasmuch as it entirely leaves out that which is of the very essence of the idea, which constitutes the fundamental difference between architecture of building,—namely, the idea of *art* in its highest sense, and we are infinitely nearer the truth if for the "art of building" we substitute "building in accordance with the principles of art." It is of little moment how well your builder understands the nature of

materials and the principles of construction, how well he can heat, ventilate and drain; so long as he deals only with materials and material facts he is not an architect. The architect, like the poet, is a creator; in and through all his facts works the creative mind; his materials are means, not ends; the fire of thought gives to his materials a value above the gift of science and beyond possibility of statement in terms of money. He deals with commonplace things in the most practical of ways, and adapts them to everyday uses, but he is an architect just in the proportion in which he makes practical things accordant with and subservient to an ideal. In short, he must be an artist and an idealist that he may be an architect. In this it is that a course of study, based on material facts, must fail to train up architects even though supplemented by historical analyses of styles and courses in drawing and modeling. In the failure to recognize this fundamental principle is found the explanation of the existence of so many monstrosities in our public and private monuments and buildings. A vocation in which art is a chief factor must indeed be conducted on business principles, but it defies any attempt to adjust its final tests on lines determined by ordinary routine occupations. It may seem highly desirable to the busy man of affairs to measure art in terms of the stock market and to judge its creations as he would a cargo of lumber, but once brought down to that level it has perforce lost that which was its chiefest value, it is salt which has lost its savor. This is the fate that has overtaken much of the architecture of this country. It has descended to the level of a business pure and simple; it has lost its saltiness. Certainly architecture cannot be rehabilitated in its proper guise by an education on purely technical lines. Excellent builders we may get, but never an architect; unless, perchance, in spite of his education, rather than by it.

IF a technical education alone cannot bring forth an architect, what shall be said to the young man asking what studies he must pursue? Never was this question so vital in any country or time as in this country at the present day. We have fairly broken loose from the methods and styles of a decade or so ago. Then to be an architect means to erect buildings after certain forms in vogue as if by authority. For large work scarcely a thought was given to any styles except Renaissance and Gothic, and we add with regret that scarcely a thought was given to them. Folios and photographs set for the architect his limit in forms and details. By holding to his models he might turn out very decent structures ad infinitum; and so long as he held to his folios there was little danger of his doing anything extraordinarily bad. But there was also little incentive to creative work, and the majority of architects were no longer creators but copyists. A copy may be a very fair thing in its way, but viewed from a purely artistic or creative standpoint the best copy is hardly worth a mediocre original; and a copyist is not an architect whether his models be good or bad. It was, then, a great day for architecture when the set styles so long regnant were dethroned and each architect began to cast about to see what he himself could do. The immediate outcome has not been altogether cheerful to behold. When any large body of men who have been working under the restraints imposed by the laws of a fixed and highly developed style are set free from these limitations and left to work out their own ideas, there will inevitably be at first an immense amount of very crude and undigested work. The fruits of an uneducated and unrestrained imagination are fantastic and extravagant. A penalty always attaches to freedom. Yet in freedom is the possibility of progress, and there is more *hope* in one crude

original than in twenty fair copies; and herein lies the encouragement for American architecture. It needs that the untrained mind be trained, that the errant imagination be not quenched but subjected to the control of artistic principle to make an artist of the builder and experimenter, to make, in fine, an architect.

IN a sense it is true that education cannot make an artist; but it is probably no more true of an artist than of a lawyer or a mathematician. Education, unable to give a man capacities, may utterly warp what nature has given him. Hence the war of words concerning the utility of schools of art; the one side claiming that the education of the school of art cramps native force and leads rather to repression and imitation than to creation in accordance with native instinct and talent; the other side asserting that unaided the artist spends months in acquiring technique where, with the knowledge of the schools, days should have sufficed. The freedom which our architecture has even now but acquired we cannot afford to lose through a wrong education. But may not that part of the architect's training which constitutes him something other and more than a mere builder be acquired through an education primarily neither technical nor narrow in scope? From what has been said of the nature of the architect's vocation it is a short and logical step to the conclusion that what he does must be a function of what he is; that that by virtue of which he is an architect must be in his ideas, in his imagination, in him rather than in the materials and the processes of which he makes use. What he most needs today to make it certain that he will no more do crude things or weak things or exaggerated things is a refined perception, an imagination cultivated but controlled, an artistic principle: a refined perception that he will unerringly discern between good and bad, and will shrink from coarseness and brutality in form and detail; an imagination cultivated and controlled that he may conceive his designs in a large and liberal spirit, may create truth, not fantasies; an artistic principle that he may have within himself, a pervading influence and contentment that will suffer him to be neither a copyist nor an experimenter but will impel him to the exercise of his own best powers in accordance with felt laws of beauty.

THESE specialized faculties are to be trained only by culture on broad lines; by close study of all that is best in all art; by an intimate acquaintance with, an entering into the mind of the great dramatists and poets, the great novelists and essayists, the musicians, painters and sculptors. What is not in a man does not come out. To do great work an artist, an architect, must have great thoughts, great inspirations; must be spiritually and mentally alive and impressionable; must feel the beauty of nature and life, like Seyd, seeking beauty everywhere; must be such a one as Emerson describes in the stanza entitled, "Culture." This means a habit of thought, a getting nearer daily to beauty and the heart of things. It is very certain that if beauty is constantly making its subtle appeal to a man, the inspiration that thus fills him will find its expression in his creative work, and will forbid him to do inane things or ugly things. The education that induces this attitude of mind is not to be had in the acquisition of facts or of technique. It is open to any man who will strive to put himself *en rapport* with the great masters of beauty, who so opens himself to impressions that he is being perpetually born again into higher and yet higher appreciation of the beauty that beckons to him on every side. This self-educating, this individual striving after inspiration at first hand is all that can lift our liberated architecture above grossness and triviality, and make it great.

Photography in Architecture.

PART I.—BY FRED D. FOSS.

PHOTOGRAPHY has ceased to be an experiment, and is rapidly reaching a position where it commands an almost universal interest with the general public, and it is found to be indispensable in all arts and professions. The student, the professor, the man of letters, the man of leisure, in fact, anyone may derive infinite pleasure and a vast amount of instruction from the practice of this beautiful and useful art. The exposure of, and the subsequent development, of the photographic negative has been so simplified by the introduction of the dry plates, and the cost of the necessary apparatus so materially reduced that it is now possible for anyone to become proficient in the work at the expenditure of little means—comparatively—and time, and the pleasure derived, not to mention the knowledge gained, will more than offset the monetary outlay. To architects photography is of especial value, for it enables them to indelibly record the progress of their work, be it a one-story frame or a colossal business block. I propose in these articles on photography to give practical information and instruction in the workings of the process that will enable anyone to successfully practice the art, whether it be for pleasure or as a means of record. I shall avoid all technical terms and phrases, and lean to the side of plain English. The practical uses of photography are so well known that a wordy introduction is superfluous, so I shall commence with a list of the articles and apparatus necessary to be procured to make a photographic negative and the prints from the same. Assuming that I am writing principally for architects who desire to make good work as a means of instruction and record, I will avoid a description of what is known as “amateur outfits,” and describe a practical and good apparatus that will not only photograph architectural subjects with absolute correctness as to lines, but will also make portraits, should such be desired. The first and most important article of all is the lens, as, by its means, principally, is the action of light conveyed to the sensitized plate. Lenses are made in various styles, and combined in numerous forms to produce different effects. In selecting these the purchaser should plainly state to the dealer the kind or class of work he intends doing, so as to avoid troublesome delays. The simplest form is known as the “single combination.” It appears to be but one lens only, though in reality it is two sealed together. One is of flint glass, the other of crown. A judicious or proper combination of the two “achromatizes” them. This single achromatic lens is suited for general landscape work, but not for architectural pictures, as it does not yield *rectilinear* lines, i. e., a picture of a house, where the latter nearly covers the plate, would show the sides of the building *curved* or “barrel-shaped”; on the contrary, reversing the lens and using it in that position on the same subject would render the outlines “mortar-shaped,” i. e., curved inward as they approached the center. Hence, to procure strictly rectilinear pictures a combination of the two above stated results must be resorted to, giving what is termed a “double achromatic combination.” When very rapid exposures are desired, a lens must be used that will work with its full aperture and at the same time covers the plate sharply. It requires a certain degree of light to act sufficiently on the sensitized plate to produce the proper effects, and, although this period of exposure is reduced to a minimum by the advent of the quick-working dry plates, the lens must be chosen that will best suit the operation. It is not my purport to advertise any particular make of lens or apparatus in these articles, and when any special style of apparatus is recommended it is because it has been used and its practicability thoroughly verified. Thus, when it is desired to make a picture on a 4 x 5, 5 x 7, 6½ x 8½ or 8 x 10 plate, select a lens that is guaranteed by the makers to cover the size plate selected, clearly and sharply, with its full opening, always bearing in mind the class of subjects you desire to photograph. For general landscape, architectural subjects, portraits, groups and instantaneous work, a Dallmeyer, Voigtländer, or a Beck lens is recommended. These lenses vary in price according to the size plate they are to cover, thus, a lens of any of the mentioned makers to cover a 4 x 5 plate costs (about) \$28; a 5 x 7 plate, \$39; a 6½ x 8½ plate, \$48. Of course there are cheaper lenses in the market that are advertised to do work fully equal to the higher priced and better known lenses, but it has been my experience that these do not substantiate the glowing promises of the makers, in fact, I have never been able to get a satisfactory result with anything but first-class apparatus, and I have found that the use of good instruments produces a marked degree of satisfaction in the finished negatives and prints, besides one is not so liable to have black marks recorded against him, when, by the use of a cheap lens, he finds on developing a plate he has spent hours to obtain that the lines of the building appear to have been drawn with a crimping iron. Therefore, I say, get good apparatus. It costs a few—a very few—dollars more at the outset, but the satisfaction derived by making fine correct negatives, with absolute rectilinear lines and a beautiful graduation of tones from the highest lights to

the deepest shadows, more than repays one; so purchase any one of the three mentioned, and if you do not obtain good results it is the fault of the user and not of the lens. The next article of importance is the camera, which may be briefly summed up as a “light tight box.” The use and appearance of a camera is so generally known that a description is unnecessary. There are numerous styles of cameras in the market, from the minute “vest pattern” to the gigantic “60 x 60.” The most useful size for architects’ use is what is known as a “5 x 7.” This camera holds a plate of sufficient size to make a negative large enough for all practical purposes, but should a larger picture be desired the 5 x 7 negative can be used to enlarge from, or if one desires to make direct negatives of larger size a larger camera will have to be purchased. For general outdoor viewing where one desires to do general work, the size mentioned (5 x 7) will be found most convenient. Should any architect desire to extensively use photography in connection with his work and make pictures of larger size, then a “four-four” (6½ x 8½ inches) camera will be found very desirable. Perhaps the best, if not the very best, styles of cameras that an architect can possess for general work are those known to the trade as the “Scovill St. Louis Model,” and “Blair’s Reversible Back,” both of the front focusing pattern. The points of excellence in these two cameras are so nearly similar that a description of one will suffice for both. The ground glass of the camera is stationary, the image being focused by means of a screw and rack movement, so that a very fine definition can be obtained. Another object of the stationary focusing screen is, that the focus of the eye does not have to be changed with every change of the screen, thus enabling one to have a clear vision of the screen and retain it while the reflection of the object is being sharply adjusted. Another great advantage possessed by these cameras is the movable ground glass. By a neat arrangement of springs the glass can be drawn back to admit the shield, or more plainly speaking, the plate-holder—in which is placed the unexposed sensitive dry plate—thus entirely doing away with the removing of the ground glass every time an exposure is made.

[To be continued.]

Life and Works of Jean Francois Millet.*

BY WALTER CRANSTON LARNED.

BUT his life at this sad time was not all sadness. His home was happy, and his children gathered about him in the evening with his wife, and delighted him with childish nonsense and village gossip. Hence the tenderness, the spirit of love that pervades his picture of the home. Often does he paint these home scenes, women at the spinning wheel or carding the wool; or perhaps some old grandmother gently teaching the little girl how to knit, and thus early bear her part in the common labor of the household; or again he even takes a domestic scene in which is no tinge of sadness—a fond father and mother teaching their little one to walk. The father holds out his arms and the mother at a little distance from him supports the child, which hesitates to take the few steps alone. Pelloquet says of the “Woman Carding Wool”: “If I possessed one of those princely galleries which are the pride of Italy, I would willingly place the ‘Woman Carding Wool’ between an Andrea del Sarto and a Raphael. I think those two noble geniuses would not blush at such companionship.” While the critics in this year, 1863, are thus warring about him, Millet remained quietly at home, and in the evening he would lean upon his garden wall, saying to himself: “Truth is there. Let us fight forever.”

And so he works on, painting great pictures when his health, which began to fail him, would allow. His wife is attacked with a serious illness, and he takes her to Vichy for her health. Afterward he goes with Sensier for a little excursion to Alsace and Switzerland which did him much good. At last, in 1868, he was made a Chevalier of the Legion of Honor. It had taken the French government seventeen years to find out that Millet was a great artist. In 1870 he was made one of the judges of the Salon, hence this year marks his final triumph.

Then came the Revolution, the Commune and the Prussians. Millet is driven from Barbizon by the advancing Uhlans and goes to Cherbourg, where he is so much affected by the woes of France that he cannot paint at all for a while. But at last he paints from his windows at Cherbourg some wonderful pictures of the sea. Of one of them called “Earth, Heaven and Sea,” Silvester says: “This picture felt and expressed like a psalm, is not a composition, although art’s labor is consummated in it. It is an effusion. It is all light, all soul—this painted poem—of an originality most powerful and calm, an originality achieved and not altered by study, reifying only on itself, although profoundly subjected to nature, and bound by a spiritual relationship to all that is beautiful, to the Bible, to Homer, to Dante, to Michael Angelo, to Ostade, to Ruysdale, to Claude.”

And now at last the fierce struggle is over. All around are heard words of enthusiastic admiration. Orders pour in upon the artist from every side, and his pictures sell readily at prices which would have merely dazzled him a few years before. The truth has conquered. The great, self-sacrificing labor of a lifetime sees for a brief moment a full reward. More than the money or the comfort it brings to one long used to grinding poverty, is the peace which comes to his tortured spirit as he feels his life, so heroically offered at the shrine of truth, has not been a vain offering; and as the proud, glad thought possesses him, that his message has reached the artist heart of the world, almost a dead heart before he came, and with somewhat of that power which raises the dead to life, has thrilled

*Lecture delivered before the Art Institute of Chicago, February 8, 1887. Continued from page 94, Vol. IX, No. 10.

the very souls of artists and thus become the harbinger of a new era. But alas! It is too late. There is no earthly joy for this sad, gentle soul. With slow and feeble steps he is walking with his beloved Sensier amid the dear scenes of his youth. A stranger lives in the Millet homestead. Long since it has been given—an offering to their poverty. But the old trees are there, and the gaunt rocks whereon the surf booms. Yonder is the hillside on which the sower sowed as the oxen wended homeward; and there is the well, embowered in green vines whose glossy leaves reflect still the sunlight which irradiated the simple, loving wife who carried water thence, burdening all her strength that she might serve without complaint the man of her love. The window still is there at which sat the sainted grandmother, patiently turning her wheel, or guiding gently the clumsy fingers of the little maid who must needs learn to knit. Through that low door had often entered the poor to find warm help; and thence had come forth the poet-peasant father in the early morning, unfolding, as he went to work, nature's secrets of beauty to the eager lad. Yes, all is there. The sweet memories of childhood-crowd fast upon him, and dim with tears those deep, true eyes, already dimmed by the fast-coming mists of death. Weary, sad, ready to lay down the burden of life he had found so heavy, he still tries to work, and does indeed complete for Mr. Shaw his glorious picture of the "Priory of Vauville." But it is the last time. Returning to Barbizon, the scene both of his bitter trials and his rapturous communions with nature, he lays him down to die. He feels that he dies too soon. He seems called away at the very zenith of his power, when the secrets of life and nature lie before him like an open book, and his trained eye and hand could unerringly trace those glorious mysteries which were revealed to him. But so it is. As he lies patiently there awaiting the final summons, a stag chased by the hunters flies toward him and is slain almost within his sight. Millet who had never loved hunters, sees in the fate of the poor stag an omen of his own doom. Truly it was a fit omen. All his life he had been hunted. The hounds had always been on his track. He had found no pity these many years, but like the stag he had not complained. Nor did he complain now, but calmly breathed his last. This was on the 20th of January, 1875.

It does not seem meet that the sad picture of the dying stag should be alone associated with the last moments of this great man. As the unfinished "transfiguration" stood by the bedside of Raphael, so should the "Angelus" hang above the couch whereon lay the dead Millet. For it tells of a life of labor, hard and unceasing. The man and the woman alike must share it. They must leave the beauty of their youth, and the gayeties that youth loves, and harden their young muscles by stern toil until the joints stiffen, and the comeliness all departs. But ah, the light above them! How it irradiates the sky! There is in it peace and rest for them; nay, more; there is beyond it the raptures of the Cherubim and Seraphim, the heavenly music, in whose strains they, too, may ere long bear a part. All the evening air is tremulous with the tones of the far-away bells, coming softly, as though they loved to fly through the radiant air. In these peasant hearts the "Angelus" tones find full response. There is reverence, love and faith within them. No labor and no sorrow shall stifle these, and when the "Angelus" bell rings for them the last time, it will summon them to the unfailing treasures they have laid up beyond, to the joy and light, and the life which shall be theirs forever.

The deepest and most vital quality of Millet's method of painting is the use of all his artistic resources as a means of expressing something, and never as an object in themselves. This is not the usual French idea. M. Taine's maxim, "art for art's sake" means something very different from this, for it implies that the dexterity of a painter may, in itself, be enough to make his pictures true works of art, without regard to the dignity or value of their subjects. Many painters follow this theory, and content themselves with the brilliant execution of difficult feats of technique. Millet was more in accord with the best English critics, in believing that art is a means of expression. Lessing certainly teaches the same idea, but he regards beauty as the highest end and aim of art. If the finished picture or statue is not beautiful, it is not true art, according to the great German critic. Taking this thought of Lessing's as a text, some have spoken and written in disparagement of Millet's work, because, at times, he certainly is careless about this law of beauty. Millet thought truth was the highest thing in art, and, as all truths are not beautiful, so some of his pictures, which deal with painful subjects, cannot be called beautiful in Lessing's sense of the word. The "Vineyard Worker Resting," the "Man with the Hoe," and the famous "Woodcutter" are not beautiful pictures. Their object is not beauty, but faithful telling of sad truth. The question about such pictures will ever be—Was the truth worth the telling, and has the artist told it faithfully? Millet himself believed that he was called to paint the peasant life of France, in much the same way as a missionary thinks he is called to preach the gospel, hence he did not hesitate to paint the sad, the painful, even the repulsive parts of it, as well as its poetic, hopeful and almost joyous side. The critics, however, will perhaps be right, when considering these painful pictures independently of their relation to the artist's lifework, in holding them of less value, merely as works of art, than those which are at the same time beautiful and truthful. Doubtless the "Angelus" is a greater picture than the "Man with the Hoe." But enough has been said to define clearly the determining principle of Millet's work. It remains to study the way in which he expressed the truths he saw. The quality most noticeable in his method is the wonderful breadth of his characterization. His figures are history in themselves, and often a most comprehensive history. Everything about them is expressive; face, form, attitude, drapery, color, surroundings, whether landscape or interior, there is nothing that does not help express the central truth. Much attention to minute detail would be incompatible with the artist's purpose, hence he paints in broad masses, appreciating, as Barye did, the value and grand simplicity of these. The eye is not confused by many lines, complicated tones, and intricate effects of light and shade, but perceives directly the painter's meaning. Simple as this treatment may seem to those who do not know how much study and mastery of technical matters it requires, nevertheless it is the grand manner in art, and distinguishes many of the world's greatest masters, both in the classic

days and in the times of the Renaissance. Michael Angelo painted in this massively simple way, and, indeed, Millet has often been compared with this mighty man. With both truth and powerful expression of it were sought with the entire fervor and devotion of an artist soul, and both found in simplicity, combined with breadth and heroic grandeur of treatment, the best means for expressing deep truths through art. Let no young artist think, however, that he can attain Millet's power of expression, or anything approaching it, merely by copying his manner. Much deeper study is required before a painter can omit details, and paint broadly, than is required for merely literal work, because an artist must have a thorough knowledge of all the elements composing a subject before he can determine which are essential and which are not, what may be left out, and the proper degree of force with which to emphasize each one of the selected elements which are to remain in the finished work. So strongly did our own George Fuller realize this, that he is said to have painted his most ideal pictures in the first place from a model, with as nearly literal and detailed accuracy as he could command. Then he would put the picture out of his sight for a time and think about it, seeking to impress upon his own mind the essential elements of the art thought he wished to embody. Afterward he would again approach his canvas and deliberately paint out all he thought unnecessary, all which did not help express the central idea.

Probably the rejection of the superfluous is to an artist a harder task than the literal copying. This is what the school of the so-called impressionists aims at, and it may be truly said that in one sense Millet was an impressionist, the greatest of them all. But there is a sense in which Millet does not at all resemble most impressionists. They often aim to produce in their pictures the same effect which would be produced upon the eye at the first glance upon some scene in nature or human figure, before more careful examination has had time to reveal anything except the chief truth. Such pictures often produce a strong effect at first, but afterward it is seen that they are unnatural, and sometimes much strained and exaggerated. Millet's aim was far deeper than this. He was not merely seeking the best way of producing by his pictures the same effect upon the eye which a first glance at the subject in nature would produce, but he wished rather to impress the mind with the very deepest truth involved therein. If he would do this thoroughly he must never paint untruly or carelessly, but, on the contrary, with the utmost fidelity not only to the truth of surface, form and color, but to the inward truth of life and character. This will be better understood by considering some particular picture. In looking at "The Sower," for example, the eye is impressed at the first glance, much as it would be by the actual scene. The dark figure, with its majestic stride, outlined somewhat dimly in the fading light against the plowed field and sky mellow with the tints of sunset—all this the eye would see directly, and Millet produces this impression by means similar to those used by painters of the impressionist school. But this is not all. Deeper study of the picture reveals more and more of truth and meaning. It is seen that the "Sower's" movement and gesture are grand, rhythmic and strong; that his face is serious and earnest, suggestive of a feeling almost religious. It is felt that he is truly a French peasant, a toiler of the field, who toils as his fathers did before him for generations. The oxen, turning homeward, after finishing the last furrow, suggest a hope of rest for them which contrasts strongly with the sower's continued labor. The man works on when even the patient ox yields to fatigue. The birds, which flock in the air above the field, ready to seize what they can of the newly scattered grain, tell of the continuous struggle of man for existence, for the forces of destruction threaten the fruit of his labor, even from the beginning.

A picture cannot mean so much as this unless it is true not only to the outward seeming of nature and man, but also to the deep meaning of the human life, depicted in its harmonious relation to the natural scene.

The picture is painted with Millet's strongest and broadest manner, and with the utmost force of characterization which he possessed, and it illustrates, as well as any, the power of his method and its success in impressing thought.

He used the vividness and intensity of the impressionist school, studiously and carefully, to make it tell all he knew of the subject's deepest truth—a rare combination, indeed, and one which has few parallels in the history of art.

The method of Millet has thus far been spoken of in a somewhat general way, and without attempting to point out the particular qualities of his technique in the strictly artistic sense of the word. How did he draw? Was he a colorist? Could he, like Rembrandt, produce powerful effects of light and shade? Was he master of composition? Such questions as these will always be asked by any artist, or student of art, about the works of a painter. As a draughtsman Millet is practically beyond criticism, especially in drawing the human figure. This is the more remarkable because he rarely painted from a model. He had so deeply studied his subjects from life with an observation of simply marvelous acuteness, that he did not need the actual presence of the peasants, in order to put upon canvas what was already accurately drawn and painted in his mind. This power of rapid, truthful drawing was always a distinguishing characteristic of the man. It was born in him, but, nevertheless, it was most highly developed by hard and patient study in the rigorous French school. He studied from the nude figure, and became a thorough master of its varied curves, its articulations, the strength and delicacy of its tones, and the expression of power, in its differing attitudes and poises. Having thus learned what the schools could teach him about drawing and painting the human figure scientifically, he began to study the forms of the particular men and women whom he was to paint, and to depict what were the characteristics which distinguished them from the ideally perfect grace and beauty of the human form. Hence came it that his drawing had so much character. He knew exactly how to emphasize the effects which long continued toil impresses upon the face and form. In the "Angelus," for example, it is clear that the joints of the figures have been stiffened by hard labor, and all grace of suppleness is lost, but it is also clear that great strength of body is there, and with strength there is always a kind of grace. The charm of the picture

comes mostly from its spirit, but the drawing is so full of character that it preserves a certain beauty of line and poise where most artists would find little but awkward heaviness. Whatever quality of beauty, grace, strength, stiffness, or even awkwardness, he wished to emphasize, his rapid, facile, highly-trained pencil never failed him. Always the touch was sure to produce the exact effect desired, because it was guided by science and study of life, and also directed by that deeper truthfulness, still, which comes from real sympathy and poetic inspiration.

As a colorist Millet has often been criticised. Certainly he was not a colorist in the sense that Delacroix and Decamps were, that is his pictures were not chiefly remarkable for color. The color was always subservient to the thought, and was not with him so potent a means of expression as form. According to Ruskin form has more to do than color with the vital expression of artistic truths. Color savors more of the accidental. Form has greater permanency. The broad and lofty forehead of the man of mind, the wrinkles which a long life has chiseled upon the aged face, the stiffness which unremitting labor brings to the limbs, the grace of rhythmic motion, the expressive power of attitude, poise, and above all features molded in differing ways by feelings light or deep—all these have to do with form rather than color. To tell through plastic art the agony of a Laocoon is a harder task and needs more of art's deepest truth than to paint the rosy skin of a fair young girl. The greatest painting, then, will emphasize form rather than color, since it cannot otherwise so well express the deepest truths. So was it with Millet. Since truth was always his aim he laid most stress upon that which would best express it. Compare his works for a moment with those of a man like Monticelli with whom color was the chief aim. No man can say that Monticelli's pictures are true in any deep way. They are gorgeous and splendid. The eye rests upon them with pleasure, for their harmonies are lovely, their richness is superb, and their voluptuous softness steals over the senses like a dream, but it is often hard to say what they mean, or whether they mean anything more than that the rainbow and the prism give the joy of lovely hues. This cannot be said with equal truth of Delacroix and Decamps, for there was much in their pictures beside beauty of color; nevertheless it is true that they did not express or try to express such deep truths as filled the thoughts of Millet.

But it cannot be said that Millet was lacking as a colorist. While his color, like everything else, was subservient to the thought he wished to express, it was nevertheless beautiful, harmonious, and at times so lovely as to give his pictures something of the charm which comes from color alone. He loved the more delicate tints, and was sparing in his use of red. In the "Sower" the whole tone is deep and rich. In the "Angelus" the sunset sky is radiant thought, its tints are of silver rather than gold. In the "Potato Planters" there is a mellow radiance, subdued indeed, but full of the beauty of sunshine. The sunlit blue and green of the "Water Carrier" is most delicately lovely. In the "Feeding the Chickens" there is a warmth and radiance which suggests, if it does not equal, the glowing canvases of Decamps.

It does seem strange that one who painted with such rugged force, such almost stern devotion to truth, whether lovely or not, should have used so little impaste, so few of the artificial means by which a mere colorist is wont to heighten and emphasize his effects. Nevertheless the explanation is simple. He used color as he used form, merely as one of the means which his art gave him for the expression of his thought. Judged by this standard his color is always good, and often admirable. Certainly it is never inharmonious, nor does it ever force itself upon the eye in such wise as to obstruct the vision of things deeper and more spiritual.

Millet's pictures are always excellent in tone, that is in the relations of the colors to each other, and in the effect of light and shade upon them, and he may perhaps have had something of that spirit so characteristic of modern French art, which is ever prone to sacrifice pure color to tone relation. Corot has followed this idea as far as true art allows. Millet followed it too, but in no exaggerated way. He was impelled to follow it because general tone relation sympathized more with the entire expressiveness of his pictures than was possible for the beauty of color pure and simple.

So, too, in his management of light and shade, there is no exaggeration, but much artistic expressiveness. The secret of Rembrandt's wonderful chiaro-oscuro, and the effect it gives his pictures is thus explained by Henri Havard, in his work on the Dutch School of Painting. "The old German painters, the early Flemings, the Dutch of the first period, certain even of Rembrandt's contemporaries, had endeavored to give to their compositions an almost uniform light, assigning the same relief and the same importance to all objects, treating accessory points with inflexible precision, omitting nothing, and neglecting nothing. Rembrandt, however, like a great master, proceeded in a totally different manner; he placed the important facts of his picture in a clear light, and plunged the rest into shade. But his shadows are never 'a means of veiling weak points, or of slurring over difficulties.' They are, on the contrary, transparent and luminous. 'Through them all the accessories which complete the action, or explain the scene can be distinguished.' Details are not neglected, 'but thanks to the light and shade, nothing ever usurps an importance which is not its due. No point escapes our eye or evades our curiosity, but we return instinctively to the salient features, the essential part of the picture, which, in all this great artist's works, stands out prominently in strong light.'"

This is in one sense true of Millet also, although he did not lay so much stress upon effects of light and shade as did Rembrandt. Like his drawing and his color, chiaro-oscuro was also to him merely a means of expression, and used with rigid subordination to that end. In one way, he uses chiaro-oscuro with a greater variety of expressiveness than did Rembrandt, for while the latter almost always brings out his figures in strong light, against a dark background, Millet sometimes puts the figures in deep shadow, while the background is luminous. This is true of the "Sower" and also of the "Angelus," his two greatest pictures. The reason is plain, though full of profoundest meaning in both cases. The central fact of each picture is earnest, religious faithfulness to duty in the

hard and homely peasant life, and also the beauty, dignity and poetry of such faithfulness. Lives of duty, however homely, are beautiful even upon this earth, but their beauty is fitly emphasized by an upward look toward the heavens above. Indeed it must have seemed to the sad Millet that the real and poetic beauty of such lives could not be clearly shown in the toil-bent frame of the laborer, nor in his field, though made fruitful by unceasing work, without bending above him the heaven luminous, tender, restful, opening its portals of joy and peace to the humblest of earth's wayfarers, whose faithful soul leaves the toil-spent body to find an eternal reward.

The man and the woman in the "Angelus" are still in the shadow, but the light is above them, and already touches their hearts which thrill responsive to the church bell's tone, sounding forth peace, good will to men.

This is as true and deep a use of light and shade as can be found anywhere, although contrary to Rembrandt's method of throwing strong light upon the important figures always.

These thoughts lead to a consideration of Millet's composition. The keynote here is harmony. The figures and the landscape or other surroundings must be component parts of an entire whole. No part must be slighted for any other, but all brought together in perfect relation, with due emphasis upon that which has most dignity.

Thus Millet was not wholly a figure painter, nor entirely a landscape painter. He painted pictures in which both the figures and the landscape wrought together in embodying a single art thought. The mysterious poetic quality of his shepherd figures is often greatly enhanced by uncertain moonlight, or deepening twilight shadows, and yet the full light of a noon-day sun in summer will sometimes, with equal force, help express the artist's meaning. Always the keynote was to make man and nature harmonize, and in this is one most weighty element of Millet's power. Properly to blend the spiritual, the mental, the æsthetic and the sensual was the problem of Wagner's life, and so was it in the art of Millet. Both have succeeded in differing ways, though here and there a fault appears either in the thought or the expression of it. As to the technical rules of composition, Millet must be held a master, so much so that he worked within their limits as easily as a poet does within the laws of meter and rhyme. He may have laid special emphasis upon the laws of principality and expression, but he certainly did not neglect those which enforce harmony, simplicity, contrast and balance.

But it is idle thus to analyze the powers of Millet. One might as well uproot a plant to learn its secret of growth, or tear the petals from a rose to find the source of all its fragrant loveliness. The real, deep, inspiring essence of his art is true poetry. He finds the grand, even the sublime in every little thing that touches human life. He reverences man as man, because he feels that there is no human brow which has not been sealed with the imprint of immortality. Real poetry is the deepest expression of truth known to man. That art is most real, most abiding which has in it most of that deep power whose roots strike down far into the spiritual and undying part of man's nature.

"In the sweat of thy brow shalt thou eat bread," saith Genesis, "well done good and faithful servant," saith the fulfillment of the law. In the law as old as man, and in the promise which reaches into the eternal must be sought the secret of Millet's artistic and poetic power.

[Concluded.]

Engineering Training at Vanderbilt University.

PERHAPS no other indication of a healthful development in the South is more reliable than that southern educational systems are making rapid strides, and are yielding encouraging results both quantitatively and qualitatively. Not only is this true of academic culture, but in industrial education this hitherto agricultural section is laying the safest foundation for her industrial development by providing her own technical schools.

Among the foremost of these is the engineering department of Vanderbilt University, Nashville, Tennessee, which, though but recently established, already has sent out well-trained, energetic young men into positions of usefulness and responsibility in nearly every southern state, and so well is this movement appreciated that the applications for young men to take positions during the past year have been so numerous that it has been almost impossible to retain the men until graduation. Every man in the senior class this year received important positions before the close of the session, and many of the undergraduates are filling positions of trust.

The technical instruction is of two kinds: Engineering instruction proper, and manual training.

It is the aim of the engineering training:

1. To provide theoretical and practical instruction in the general subjects in the profession of the engineer, and to provide special technical training in one or more of the several subdivisions of engineering.

2. To combine with class and lecture instruction such actual work of the nature of instrumental practice, field work, shop work, drafting and laboratory practice, conception and execution of plans, projects and designs, as shall illustrate the application of theory to practice, and qualify graduates to occupy at once subordinate positions while acquiring professional experience.

The scheme of instruction in the regular courses of engineering comprises a three-years' course of general engineering studies essential to a broad and thorough training in any branch of the profession. This is followed by a two-years' course of specialized study and practice pertaining directly to some one branch of engineering. Such courses have been organized and equipped for the three leading divisions of the profession, viz: civil, mechanical and mining engineering, either of which may be selected by the student on the completion of the general course.

Visits of inspection are made to structures and operations of professional interest in and about the city. Nashville, as an important commercial center of railroad and river communication, necessitating important buildings, bridges, water and gas works, manufactures and processes, affords excellent facilities for such inspection and study. Field-parties in

surveying and road-engineering are regularly organized and directed by the instructors. Ample facilities for drawing are furnished in two drawing-rooms, provided with individual drawing desks and boards, models, designs, and plates.

The equipment of engineering instruments, models and specimens is extensive, and the collection will be constantly increasing.

Well-equipped wood and machine shops, under the direction of skilled artisan instructors, furnish practical instruction in woodwork and metal work.

The molding shop, casting shop and forge shop will shortly be furnished extensive quarters in a new shop building now being provided for these and other mechanical purposes.

Experimental apparatus and appliances for testing engines and boilers, as well as the character and strength of constructive materials, are provided and are regularly employed by the students.

The purpose of the organization of the other branch of instruction—viz: Manual technology—is to supply a course of mechanical instruction shorter and more elementary in character than the regular courses in engineering, but comprising studies and practical work so related as to be, for its scope, fairly complete in itself, and to constitute a valuable preparatory training for young men who intend to become skilled artisans, designers, constructors, managers or superintendents of mechanical operations and enterprises, as well as for those who, recognizing the educating value of a rational system of manual and mechanical training, desire such a course as a part of their general education. The plan of instruction comprises a foundation of the principles of mathematics, physics, mechanics and drawing, on which is given thorough instruction in the proper application of these principles to the more prominent constructive operations and mechanical trades, illustrated and put into execution in the drafting rooms and shops.

The prime object of the course is to teach young men the habits and methods of doing whatever they undertake thoughtfully and rationally, to train them to think about their work, and to work as their thoughts direct, to know the reason, and to have a definite object for every step taken; in short, to install the mind, properly trained, as the ruler of the hand, and to teach it to guide, to ease, and to render more efficient the efforts of the hand.

The course extends through two years, and unites contemporaneously class instruction and shop work in subjects closely related.

The forenoons are devoted to class work and drafting, and the afternoons are regularly assigned to the several shops in exercises three hours in length.

It is worthy of special notice that from the heavy outlay necessary to establish and maintain well equipped technological schools, tuition in them has hitherto always been expensive, and often beyond the reach of young men of moderate means. The munificence of the Vanderbilts—father and son—has, however, placed the cost of tuition at Vanderbilt so low as to present a barrier to no one; in fact, tuition is entirely free to any student in manual technology, and the class in road engineering is open, free of charge, to one properly qualified highway official or deputy from each county. These privileges are not restricted to state lines, but are limited only by the capacity of the institution, and should cause the Vanderbilt to be recognized as one of the strong agencies in the material development of the country, as it has ever been a leading power in intellectual culture.

Correspondence.

Editors Inland Architect: COLUMBUS, Ohio, August 30, 1887.

An article in your Intermediate number for August causes me to ask a question or two.

You speak, in said article, of the city hall and chamber of commerce competitions at Cincinnati as though one was "successful" and the other was not. What features in the latter did you wish to commend? Was it the fact that in one case the premiums were paid to competitors selected before the competition, while in the other the premiums advertised were to be paid for the best designs? or was it the fact that in one case the designs were submitted under *nom de plume*, and in the other the names were given and the designs exhibited to the public before the decision?

You also speak of a proposed competition at Kansas City in which four architects are to be paid, and others invited without pay, as an "extremely fair competition." If that is a "fair" competition, please give us your idea of one that would not be "fair." Respectfully yours,

J. W. YOST.

[In the editorial spoken of we referred to the circular issued by the church committee, not having space to publish it in full. We have certainly spoken sufficiently upon the subject of competitions for a number of years to make our position on the subject clearly understood. It is, in a word, that taken by the Western Association of Architects. That competitions are an evil, but must be recognized. To do this seemed possible. A committee gave a year to the consideration of a method by which architects could enter a competition with professional honor. A code was formulated and adopted as the only rule under which architects could enter, and every member of the association is pledged to promote its use. The Cincinnati chamber of commerce competition was after the general provisions of this code, three vital points being that architects were paid for sketches submitted; that an expert adjudicated the drawings, and drawings were submitted under a *nom de plume* or motto. The city hall competition was a simple advertisement that the board "invite competition in design for a new city hall." The fact that the Grace Church invitation calls for drawings under motto, and offers to pay for the sketches submitted, returning those not adopted, is much in its favor. The way in which the Cincinnati city hall and also the armory competitions were entered into by

leading members of the profession in the state after the positive stand taken by the State Association and adoption of the code, was a most serious mistake on the part of the individuals concerned. We mean most emphatically to state that it is better to employ a reliable architect, at the schedule price, than to attempt to obtain architectural services by any form of competition, but that the only form that can be countenanced is the code referred to. Architects who enter into others, not only risk their professional reputation, but do much damage to the standing of the profession in general.—EDITORS INLAND ARCHITECT.]

Editors Inland Architect:

ERIE, Pa., August 29, 1887.

I see in your issue of June last a notice of a new method of supporting walls, when necessary to remove the lower part of same and place supports consisting of columns and beams, giving credit to Mr. F. Baumann, of Chicago, as the originator of the method. While giving Mr. Baumann all credit due as the inaugurator of a new idea, I will say that I have used exactly the same method for the purpose during ten years past, and on many buildings. Yours respectfully,

D. K. DEAN.

Association Notes.

WESTERN ASSOCIATION OF ARCHITECTS.—Convention will be held November 16, 1887, at Cincinnati. J. F. Alexander, La Fayette, Ind., secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Convention will be held the first Tuesday in February, 1888, at Cincinnati. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the first Saturday of every month, at 15 East Washington street, Chicago. Annual meeting first Thursday in October, 1887. Clarence L. Stiles, Chicago, secretary.

INDIANA STATE ASSOCIATION OF ARCHITECTS meets on the fourth Wednesdays of January, April, July and October of each year. Annual meeting fourth Wednesday in October. E. H. Ketcham, Indianapolis, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at Kansas City on the second Tuesday in January, 1888. Charles E. Illsley, St. Louis, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of August, 1887, at Spirit Lake. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 3, 1888. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Wichita on the third Tuesday of January, 1888. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting third Thursday in August, 1888, at Cleveland. F. A. Coburn, Cleveland, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets bi-monthly. Annual meeting third Thursday in February, 1888, at Memphis. T. L. Dismukes, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Houston on the third Tuesday of January, 1888. S. A. J. Preston, Austin, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1887. F. B. Hamilton, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October each year. F. M. Ellis, Omaha, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday, Builders' and Traders' Exchange. W. G. Williamson, secretary.

THE WESTERN SOCIETY OF ENGINEERS meets the first and third Tuesdays of each month at 4 o'clock, P. M., at 15 East Washington street, Chicago.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS.

The August meeting of this association was called to order at the office of Messrs. Williams & Patton, Wednesday, August 3, at 8 o'clock P. M., Thomas Sully in the chair. There were present: Architects B. M. Harrod, William Fitzner, A. Toledano and S. M. Patton.

In the matter of Mr. James Freret, who had postponed joining the association until he learned whether he would be positively prohibited taking contracts, Mr. Sully reported that he had heard from the secretary of the Western Association of Architects that the status of an architect, as defined in the constitution, was absolute.

It was moved, seconded and carried that a committee be appointed to act in concert with a committee from the Mechanics', Dealers and Lumber-

man's Exchange, in regard to having suitable building laws passed by the City Council.

The president then appointed Messrs. Harrod, Fitzner and Patton to comprise this committee.

On motion of Mr. Toledano, seconded by Mr. Fitzner, and carried, an assessment of \$10 was levied upon each member of the association to meet the current expenses; this assessment to be paid within thirty days after date of meeting.

On motion of Mr. Toledano, which was seconded and carried, the secretary was authorized to have five hundred copies of the schedule of prices printed and distributed pro-rata among the members of the association.

It was moved by Mr. Harrod that individual application be made by the members of the association for admission to the Western Association of Architects. Carried.

The meeting then adjourned until the first Monday in November.

AMERICAN INSTITUTE OF ARCHITECTS.

The twenty-first annual convention of the American Institute of Architects will be held in Chicago, October 19, 20, 21. Preliminary to the regular programme the secretary, A. J. Bloor, has issued the following letter to the president and secretary of each chapter, inclosing, as will be seen, another letter to be handed by them to a member of their organization, who is thereby requested to present the convention with a paper on the paramount requirements for some designated structure with which the blank space is to be filled in.

AMERICAN INSTITUTE OF ARCHITECTS,
18 Broadway, N.Y., August 10, 1887.

_____, Esq., Pres't. }
_____, Esq., Sec'y. } Chapter A. I. A.

DEAR SIR,—Referring to the approaching twenty-first convention of the A. I. A., to be held in Chicago, permit me to call your attention to the inclosed copy of circular letter, and to ask you to fill in the blank, and let me know the name of some member of your chapter who would be likely to respond with a paper on the kind of structure chosen for treatment.

I would also suggest that another member of your chapter be selected to prepare some condensed "Suggestions toward the best and speediest methods for harmonizing and utilizing all the architectural societies in the United States, so as to secure the most good for architecture, for the public, and for the profession in America; due regard being had, as concerns means, alike to individual energy and enthusiasm, and to associative experience; and as concerns ends, alike to local sentiment and to national reputation."

And if you think it compatible with the interprofessional relations and other conditions of your locality, I beg moreover to suggest that still another member might be selected to prepare a brief resumé of the high-class architectural work lately executed in your neighborhood. Or, if preferred, the secretary of your chapter might embody this in his annual report to the institute.

As the make up of the programme will depend on the information received in regard to the above-mentioned points, an early answer is particularly requested.

Yours respectfully, A. J. BLOOR, Secretary.

For Messrs. W. L. B. Jenney, E. T. Littell, H. L. Gay, and myself, Committee of Arrangements, Twenty-first Convention, A. I. A.

AMERICAN INSTITUTE OF ARCHITECTS,
18 Broadway, New York, August 10, 1887.

DEAR SIR,—Desiring to make the approaching Twenty-first Convention of the Institute an interesting one, I beg to ask you to prepare, if at all consonant with your engagements, a short paper on "The paramount requirements of a large _____," as regards site, construction, disposition of space, arrangements for water supply, day and night illumination, ingress and exit, heating, ventilation, hygiene generally, and provision against conflagration, as well as any other points involved in this special theme, which your studies and experience have led you to class as important.

As style is generally conceded to be a matter of taste, chiefly dependent on education or temperament, environment, or fashion, or on a combination of these, I have not included it under paramount requirements; but it is, nevertheless, the crowning element of an edifice in its relation with the contemporary public (outside of its occupants and habits), and with posterity and history; and, if you think it best to enter such a wide field of your subject, the convention will doubtless be very glad to hear what a fellow specialist of your prominence may desire to say on it.

The paper should be as brief as possible, to allow time for the reading of other papers, and for the discussion of all as well as for the usual large amount of routine work. It need not be delivered to the secretary before October 1 ensuing; but if you accept the obligation I have the honor to propose to you, a speedy answer is requested, as the programme of the convention must be published shortly.

Yours respectfully,
A. J. BLOOR, Secretary.

It is proposed to collect drawings for exhibition first at the A. I. A. convention in Chicago (to open probably on second Wednesday of October), and afterward at the W. A. A. convention in Cincinnati, Nov. 16. Those illustrative of your theme would be particularly acceptable.

CHICAGO CHAPTER A. I. A.

At a meeting of the Chicago Chapter A. I. A., held August 23, 1887 called by the president, Architect L. D. Cleaveland, the following resolution was passed:

Resolved, That the president of this chapter appoint a committee of such size as he may deem expedient, and that such committee have power to act with the committee of the Illinois State Association in making arrangements for receiving the American Institute of Architects at the convention of that body, to be held in this city on the 19th of October, 1887.

The following members of the Chicago Chapter, A. I. A., were appointed to serve on this committee:

Architects William W. Clay, S. V. Shipman, F. M. Whitehouse, L. L. Silsbee, John Addison, Henry W. Hill and William Holabird.

It is earnestly desired that each member of this committee will take a personal interest in making this meeting of the institute as pleasant and entertaining as possible, and that they will feel themselves at liberty to call to their assistance other members of the chapter, if they desire their coöperation. A meeting of the joint committee of the above members of the chapter and the executive committee of the Illinois State Association is called for Tuesday evening, September 15, when final arrangements will be made. Every member is expected to be present.

NORTHWESTERN ASSOCIATION OF THE INSTITUTE OF TECHNOLOGY.

The Northwestern Association of the Massachusetts Institute of Technology, which was formed some months ago, and is composed of graduates of that institute, will give a banquet at the Hotel Richelieu, Chicago, at which the general business of the association will be transacted. The banquet will occur September 10, at 7:30 P.M., and it is expected that a full attendance of the former members of the Institute of Technology will be present.

THE ARCHITECTURAL LEAGUE OF NEW YORK.

The following circular letters are issued preliminary to the next exhibition of the league in New York:

DEAR SIR,—In sending the accompanying circular, with reference to the next exhibition of the Architectural League, the committee has been much hampered by inaccuracies in the list of architects, at its disposal.

Would you, in view of the non-existence of any comprehensive and definite information as to American Architects, be disposed to fill out the inclosed blank and forward it to the secretary of the league?

The secretary will, in return, be most happy to send you on request a compend of the results of this inquiry.

Respectfully yours,

CHARLES I. BERG, Secretary.

August 1, 1887.

To Charles I. Berg, Secretary Architectural League, No. 152 Fifth Avenue, New York.

My name, correctly spelled, is.....

My address.....

I studied at.....

I began practice.....

My principal works and their dates are:.....

In this place prominent architects are:.....

.....

.....

.....

Signed,.....

ARCHITECTURAL LEAGUE, 1887-'88.

Third Annual Exhibition at the Fifth Avenue Art Galleries, 366 and 368 Fifth Avenue (adjoining the Stewart mansion), New York City.

The third annual exhibition will be open to the public on Monday, December 19, 1887, and will continue for three weeks.

The exhibition will consist of work not before exhibited in New York City, and representing, as far as practicable, the work of the past year.

CONDITIONS.—The exhibition shall be devoted to architecture and the allied arts, as may be represented as follows:

Architectural designs; perspective drawings; sketches in pencil, pen and ink, water colors, charcoal, etc.; elevations and photographs of executed work.

Sketches for interior decoration and furniture; designs and cartoons for stained glass; mural decoration and paintings of foreign work.

EXECUTED WORK.—Stained glass; wood carving; mosaic, and casts and models of executed architectural and decorative work.

A detailed circular of blanks as to jury, framing, transportation, etc., is now being prepared and can be had after October 1 on application to the secretary.

By order of the Executive Committee.

CHARLES I. BERG, Secretary.

152 Fifth Avenue, August 1, 1887.

New Publications.

PRELIMINARY REPORT ON A SYSTEM OF SEWAGE DISPOSAL AT THE STATE HOMEOPATHIC ASYLUM FOR THE INSANE, N. Y., BY WM. PAUL GERHARD, C. E. By the Author.

An interesting pamphlet, treating of sewage disposal, by natural and artificial processes, which can be read to advantage by architects, plumbers and building-sanitary projectors.

THE ESSENTIALS OF PERSPECTIVE. L. W. MILLER, Principal of the School of Industrial Art of the Pennsylvania Museum. New York: Charles Scribner's Sons.

Mr. Miller states in his preface that his purpose has been rather to set forth such principles of the science of perspective as are of immediate use to the artist or the draftsman than to produce an exhaustive treatise of a purely scientific nature. To this end he has omitted all discussion of points pertaining to principles only to be applied under the most unusual conditions. Of the value of the matters omitted, each reader will form his own opinion, and probably, as is commonly the case in such questions, no two will agree in their judgment. Another feature which distinguishes the book is the paucity of lettered mathematical figures in illustration of the text. Mr. Miller has sought to avoid a formidable task that might deter some from undertaking the study, by substituting for such lettered figures a series of sketches in perspective illustrating the several principles. In this we incline to think that he has done wisely, for nothing tends more to puzzle and discourage a beginner in the study of perspective, whose acquaintance with mathematics usually stops far short of descriptive geometry, than the gruesome pages of mysterious and perplexing figures that greet him at the very outset of his work. Called upon, as we are daily, to inspect numbers of drawings, we have a realizing sense of the need of bringing the subject home to those who are under the constant necessity of making use of its principles in the ordinary routine of their business. We are reminded of the argument of Col. Sellers, who based his expectations of profitable sales of his invention on the number of sore-eyed Chinamen; and we are tempted in like manner to prophesy an equal demand for Mr. Miller's little work, based on a calculation of the number of artists and architectural draftsmen who *lame* in this perspective. Much as it is to be desired that every man whose occupation necessitates his making perspective drawings should understand thoroughly every branch of the subject, it would be a day of rejoicing for art and an omen of good times to come, were even these "essentials of perspective" somehow to get themselves well read by every artist who has not already in head more than is to be found in Mr. Miller's eminently practical little book.

THIRTY THOUSAND LOCKED OUT. The Great Strike of the Building Trades in Chicago. By JAMES C. BECKS. 1887.

In the compilation of this history of the most stubbornly contested dispute between employer and the employed that has ever occurred in the building trades, Mr. Beeks has shown an enterprise, as well as a public spirit, that is not only commendable, but will aid largely in placing before each the ground plan of all disputes in the labor field, and the principles that underlie their relations to each other. As a reporter of the Chicago Times, and giving his entire attention to the labor field, Mr. Beeks has, like a true reporter, given an important review of the different moves made by all parties in the controversy. The workman can read this work and see beyond the narrow limits of his trades unionism into the broad field of equality, and the arguments brought forward in favor of the personal freedom of the individual. The contractor can see where he can, through the

history of events, attain greater wisdom in dealing with his workmen, and a better knowledge of where he stands in relation to them, and both can see where they are acting under their rights as citizens and where they are arbitrarily demanding what is unjust, upon the principle that might makes right. The author, in an introductory note, makes no apology for his terse and thoroughly authentic narrative, but shows that it was called for by the fact that local conditions in Chicago were general ones throughout the building public of the country, and the results reached were of national importance. He briefly sketches the formation of the national association of builders, as the principles laid down by that association were the foundation for the plan of action adopted by the Chicago master builders in their fight against the arbitrary action of the unions in the building trades, and then running through the principal features of the different strikes and the great lockout which ensued, leading up to the final arbitration which took place between the master masons and builders' association and the bricklayers and stonemasons' union. The pamphlet contains over two hundred pages, and should be in the possession of every contractor and intelligent workman in the country, while to the student of the relations of capital and labor, not only in the building trades, but in all departments in this country, it will be valuable as a demonstration of what can be done or what cannot be done in the solution of the labor problem. Copies can be obtained from secretary of the Builders and Traders' Exchange, 157 La Salle street, Chicago.

SHORT TALKS BY AN ENGINEER. JOHN E. ERWOOD, M.E.

A vade-mecum that should be in the possession of every one who uses steam as a motive power. The author, who has a practical knowledge of the subject, presents in a brief series of *plain* talks, information of the gravest importance to owners of plants driven by steam. The book is quite diminutive, but, whoever will give its forty-one neatly printed pages a careful reading, will admit a more timely book, touching upon mechanical subjects, has not been issued from the press in a long time, and that the author is deserving of the thanks of the manufacturing public.

GRIMSHAW'S "Steam Engine Catechism," only twenty months old, has gone into its fifth edition already, and the "Pump Catechism," only six months old, is just going into its third. Either book may be ordered of us. Postpaid, price \$1.00.

THE Illustrated Catalogue for 1887, of Dalton & Ingersoll, Boston, Massachusetts, is a handsome specimen of artistic typography containing 88 pages of interesting matter pertaining to their "universal float-valves," wash out closets and other plumbing and sanitary specialties for which this house has become noted. The catalogue is neatly and substantially bound.

A NEW monthly publication, *Monographie de Bâtimens Modernes*, has been issued by H. Cagnon, of Paris, under the editorship of Raguenet, who is known to many American artists and architects as the editor of *Matériaux et Documents*. This publication proposes to make each number a monograph of some single building. The first page generally giving a perspective view, and following that, plans, elevations, details and descriptive letterpress of the building selected. Five numbers are now out. The first takes up the Hotel Boulevard Montparnasse, Paris, M. Just Lische, architect; the second, Maison Rue de Luxembourg No. 32, Paris, M. Cohn-Bousson, architect; third, Eglise Notre-Dame d'Autel, Paris, M. Vaudremer, architect; fourth, Hotel de Ville, La Ferté sous Jouare, Seine-et-Marne, M. E. Cament, architect. A feature which will especially interest American architects is the fine details accompanying each number, a feature which made a success of *Matériaux et Documents*.

AN editorial in the September *Century* closes as follows: "We feel justified in adding to these general statements a word of strong recommendation in favor of native as against foreign, or at least as against European, trees. At the best the latter are uncertain in almost every case, while the former have an inborn and a well-proved title to be trusted. The most successful ornamental planting that has ever been done in America shows its results in the streets of such towns as Stockbridge, Great Barrington, Salem, and New Haven, and was the work of men who went to the forest and not to the nursery for their infant elms and maples. Certainly our more recently planted parks offer small promise of a like maturity of beauty with their European oaks and ashes, their Scotch and Austrian pines, in almost as deplorable a state as their Norway spruces. When not ornamental but economic plantations are in question, past experience tells very strongly against European trees, while the evidence of recent experiment with native trees—as in the plantations of indigenous conifers in eastern Massachusetts—is of the most encouraging kind."

AN English building journal from which frequent quotations are made in these columns, the *Builders' Weekly Reporter*, is discussed by *The Journalist* in a current article on class journals. "This was established in 1856 by a Mr. Archdeacon, then sold to Mr. Rymer, a journalist, with whom Mr. Thomas Blower was associated. The latter gentleman afterward acquired the sole proprietary. For the first five years the paper was distributed gratis at the rate of 7,000 weekly, relying on the advertisements to recoup the proprietors. This plan does not answer, however, in England. The recipients of a gratis paper look upon it as being worth that cost and no more, and advertisers are chary and doubtful; they will not believe that a paper printed and posted for nothing can have anything of a circulation or influence when there is such a direct temptation to keep down. Mr. Blower, therefore, priced his journal at *twopence*, and since that time the paper, and incidentally the proprietor, have gone on prospering as they deserve. Mr. Blower met with an able editor and coadjutor in the late Mr. John Lloyd, formerly editor of the *Shrewsbury Chronicle*, who continued with him for many years until his death, which occurred about a year or two since. Mr. John Lloyd was also a contributor to the *Licensed Victuallers' Gazette* and a well-known and highly respected newspaper man." The *Builders' Weekly Reporter* now holds a high position among journals of that class, because of the practical quality of the articles contained in its pages. The *Builders' Weekly Reporter* also enjoys a high reputation among builders on this side of the Atlantic, and it gives its English readers frequent extracts from American journals.

Our Illustrations.

Terrace for Hiram Walker, Detroit, Mich.; Scott & Co., architects.

Houses for J. L. Houghteling, Astor street, Chicago; Burnham & Root, architects.

Fullerton Avenue Presbyterian Church, Chicago; J. S. Woollacott, architect.

Residence of Elliott H. Pendleton, Jr., erected by Plympton & Trowbridge, architects, of Cincinnati. Situated in the neighborhood of College Hill, about three miles from Cincinnati. The house contains thirteen rooms and bathroom, large pantry and china closet. The attic is finished entire, and in the basement is the laundry. The first story is of stock brick laid Flemish bond, and the second story and gables are of frame filled in with brick, shingled and plastered upon the outside. Leaded clear and cathedral glass throughout. The finish on inside is of white, selected pine, with exception of parts of finish in hall and main staircase, which are of oak. It was completed one year ago, and cost, complete, less than \$7,000.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Details of the Phenix Office Building, Chicago.

Entrance Interior of the Phenix Office Building, Chicago.

Residence of C. W. Brega, Chicago; S. S. Beman, architect.

The Phenix Office Building, Chicago; Burnham & Root, architects.

Residence for Francis T. White, Baltimore, Md.; Chas. Carson, architect.

Scientific and Art Notes.

A COMPANY has been formed in St. Paul for the laying and operation of a pneumatic tube between that city and Minneapolis, and also to operate throughout the United States. A test was made with a tube two and one-half feet in diameter, an iron ball, though papier-maché is intended to be used when in practical operation. The officers of the company are C. M. Johnson, of Chicago, president; T. B. Smalley, vice-president; T. N. Denslow, secretary and treasurer; James Stephens, mechanical engineer. The company has been incorporated with \$500,000 capital stock. The claim is made that by this system and the use of larger tubes grain or coal can be transmitted with equal facility.

W. H. Mallock has an article on "Wealth and the Working Classes" in the London *Fortnightly Review* for August that every one who is interested in the question of capital versus labor would do well to read. In the passage here quoted there seems more of sound common sense than is usually brought to the discussion of this subject. Says Mr. Mallock: "No doubt, if we accept the Socialistic formula and regard capital as congealed, crystallized, or fossilized labor, those who lived on the interest of capital, without even taking any part in the management of it, have all the appearance, as the Socialists say they have, of so many licensed robbers. The moment, however, that we realize, with regard to productive energy, that labor is only a part of it, and the least productive part, and that its growing, its progressive element is not labor, but ability, capital is presented to us in a wholly new light, as congealed ability, not as congealed labor—as the congealed contrivance, ingenuity, and enterprise of the few, not as the congealed muscular exercise of the many." If Socialists ever do think, it seems they might find this extract worth thinking about.

THE excellence of iron, in an economic form, as a roofing material is too well understood to be recapitulated. It has been the difficulties that have been met with in its application, such as has accrued through expansion and contraction, oxidization of nail holes, want of permanency of attachment, etc., that have been so discouraging as to largely affect its use. These difficulties have been battled with by inventors from time to time. Seemingly, at last, they have been overcome, or very largely mitigated by what is known as the "Garry patent," a description of sheet-iron roofing manufactured at Cleveland, Ohio. By this method, old-time processes for fastening by screws and nails are done away with, and a system of fastening by anchors and cleats and lock-joining, whereby security is given, and all possible contraction and expansion from climatic exposure provided for, all giving integrity to the roof. The circular of the manufacturers, the Garry Roofing Company, furnishes a complete exposition of this method, and can be read with edification by architects and builders. The method provides for plain and corrugated roofing, shingling and tiling, also for plain and corrugated ceilings and siding. Apparently the problem of iron roofs has been successfully solved by this Garry process.

A SYSTEM of electric lighting for private residences has up to the present time been sought for by electric engineers without obtaining results either practical or economical. The Providence *Journal* speaks of an interesting exhibition of a method that will do this and give the private houses light of a quality that large establishments hitherto alone have been able to afford economically. A little Bowers dynamo furnishes the current, and is run by a small Shipman engine of two-horse power. The dynamo itself is but little larger than an ordinary wastebasket, and the engine occupies an insignificant corner of the room, running automatically hour after hour without attention, maintaining the same pressure and speed. This little plant runs fifteen incandescent lamps of sixteen-candle power each, of unusual steadiness, and the results prove that electric lighting in private houses is an accomplished possibility. In the same room, and operated by the same engine, is a similar dynamo, the Waterhouse, of little larger size, that astonishes many electricians who have visited it by furnishing with two-horse power four arc lights of 2,000 candle power each, for it has always been accepted as a fact that a single arc light required one-horse power. The same dynamo is also seen running thirteen

incandescent-lamps of sixteen-candle power, two of twenty-five candle power, two of thirty, and one of 125, and one arc light, while it operates a sewing-machine from a small electric motor with almost fierce rapidity. This dynamo is self-adjusting, and as the lights on the circuit are successively turned off the remaining ones are not affected in brilliancy or steadiness. The especial interest in these two electric systems centers in the fact that they afford a practical solution of the problem of lighting private houses cheaply and practically.

ONE of the most prodigious engineering projects now on the tapis is that of tunneling the Rocky Mountains under Tray's Peak, which rises no less than 14,441 feet above the level of the sea. It is stated that at 4,441 feet below the peak, by tunneling from east to west for 25,000 feet direct communication could be opened between the valleys on the Atlantic slope and those on the Pacific side. This would shorten the distance between Denver in Colorado, and Salt Lake City, Utah, and consequently the distance between the Missouri river, say at St. Louis and San Francisco, nearly 300 miles, and there would be little more required in the way of ascending or descending or tunneling mountains. Part of the work has already been accomplished. The country from the Missouri to the foot of the Rockies rises gradually in rolling prairie until an elevation is reached of 2,500 feet above the sea level. The Rockies themselves rise at various places to a height exceeding 11,000 feet. Of the twenty most famous passes, only seven are below 10,000 feet, while five are upward of 12,000, and one is 13,000 feet. The point from which it is proposed to tunnel is sixty miles due west from Denver, and, though one of the highest peaks, it is by far the narrowest in the great backbone of the American continent.

"ALUMINA," said Professor Kedzie, of the Michigan State Agricultural College, to the Michigan Brick, Tile and Drainage Convention, as reported by the *Brick, Tile and Pottery Gazette*, "is the silver of clay as the French call it. Silica of aluminum is the clay itself. This is the most singular metal we have. It is a little heavier than heavy wood, and it is remarkable for its power to resist corrosion and friction. Make a cannon of it, take it into battle. If the horses get killed, the cannonier can shoulder it and walk off with it [laughter], and this strange metal is found in every part of clay. This metal has its feet in clay and its head in the air. (Blowing a film about his head.) It combines singularly with other metals; uniting ninety-five per cent of copper and five per cent of aluminum makes a rich metal looking like gold—Arabian gold, as it is called, and a different per cent of each makes aluminum bronze. It will play an important part in the arts in future. It will be the metal, for it is now more plentiful and will soon become more valuable than all other metals put together in the world, as it has so many qualities of the other valuable metals. We can make a ship of it as light as pine, and as strong as steel. It is exceedingly hard, will not corrode, resists friction, can be used for boxing on railway trains, such a thing as a blazing or "hot box" could never happen. Out of it they make knives that have the cutting qualities of the best steel. It never tarnishes, but looks like gold or silver as you choose. It has all the beauties of the finished metals. It will take a temper like other metals. It is most wonderful in its anti-friction properties, and will accept a polish as fine as agate. Clay has about twenty-eight per cent of alumina, a large amount. We can draw on this bank of clay, you can bank on this metal and it will never fail. It used to cost \$15 to \$20 per pound to get it from its hiding in clay, but new and improved methods, chiefly by an electro dynamo, of 6,000 degrees Fahrenheit, it can be produced for \$4. When it can be had for twenty-five cents per pound, you will see it greatly used, driving most other metals out of the mechanic arts. Take a bar of wrought-iron, we cannot melt it into bars, but add one-half aluminum, apply 500 degrees of heat, and you will have a compound which will retain all the properties of wrought-iron, and yet you can cast it without changing its newly acquired strength and elasticity."

THE WORLD HAS ANOTHER TELEPHONE.—A recent dispatch to the Boston *Herald* from Milford, Massachusetts, says: "This afternoon William A. Hayward, manager of the Pulson Telephone Company, invited some newspaper men to inspect the operation of a private wire at North Milford. Messrs. Jerome Prince and Lemuel Millett, of Milford, have perfected the pulson telephone after months of close study. They use no battery or electricity, operating through a wonderfully ingenious transmitter and a No. 18 taut copper wire. Mr. Hayward led the way to an apple orchard, where 1,600 feet from the house, a single wire, with a loose end lying on the ground, was stretched from house to tree. One of the party went up to the house and spoke through the transmitter and another man took off his hat—a common straw—laid it on the wire, using it as a receiver, and held conversation in an ordinary voice. At the same time Mr. William Bancroft, of Hopedale, took hold of the wire between the two speakers, to prevent any vibration and also to conduct off a possible electrical current. This had no effect whatever. During the talking three others of the party also heard the conversation by listening in hats placed on the wire at the end of a stick placed against the tree limb to which the wire was attached. Mr. Hayward placed the line at the service of the party for tests. The newspaper men then arranged a test to discover the range of audibility. The *Herald* man held a stiff derby hat against the wire near the tree, and carried on a conversation through the wire with the house, his associate meanwhile steadily retiring from the hat at right angles to the wire. When away sixty feet from the hat the latter plainly understood the conversation of both, and at seventy-eight feet could hear, but not distinguish words. A whispered conversation was plainly audible. All this occurred wholly out of doors, and one-third of a mile from the speaker at the transmitter in the apple orchard. A brisk wind was blowing across the wire. This closed the experiments with the single transmitter and grounded wire. The party then went to an adjacent building to the unoccupied loft of which a wire from the first house was stretched, connected with the second transmitter. Ordinary conversation through the transmitter could be heard anywhere in the room. Whispers, singing, music, etc., were distinguished with great clearness. Mr. Prince left the transmitter, went out of the room and down a flight of stairs, and his conversation that distance from the transmitter was distinctly heard at

the other end. The *Herald* man, standing in a yard, heard Mr. Prince clearly over the wire, although the nearest transmitter was forty feet away in a direct line upstairs in an interior room. The above tests were tried by each of the party in turn. The transmitter contains a device for imparting to the tones of voice a peculiar vibratory force, not only persistent as against other vibratory forces, but easily controlled. From Mr. Hayward's office lines to North Milford, Hopedale and Upton will be constructed, and the most rigid tests that can be devised will be tried before it is presented to the public."

THE bronze statue of Nathan Hale, heroic size, just set up in Hartford, Connecticut, is the work of Carl Gerhardt, says a writer in the *Washington Post*. Three or four years ago I first met Gerhardt. He was a young, bright and spirited looking German, and was with Mark Twain in New York. Clemens presented me to him, and, after mentioning his name, said "Sculptor." "Ah, yes," I said, with complaisant hypocrisy, as if the name had been ringing in my ears for centuries. "Yet I'll bet a dollar you never heard of him before," said Clemens to me as the artist left us. I confessed. "Well," he said, "Carl has a short but interesting history. Three or four years ago Charles Dudley Warner came over to my house accompanied by a plainly-dressed woman, and bringing between them some small figures cut in marble. 'See here!' says Warner: 'these are first-rate. This woman's husband is a marble-cutter at the cemetery works. She has brought these bits up to have me see if they are not good. They are good; don't you think so?' I agreed that they showed decided talent, and we told the woman that we would come down to the yard where he was hammering. We went. The upshot of it was that we paid the family expenses for a couple of years and sent him to Europe. It is the most profitable investment I ever made, for it looks as if the country was enriched by a new sculptor." The next spring I met George W. Cable and we went over to the academy and saw a superb bust of Mark Twain, full of vigor and vitality, just from the New York studio of Carl Gerhardt. I was told that he was at work on a statue of the patriot spy, Nathan Hale, which, as he left no portrait, was to be wholly a work of imagination. This it is which has just found worthy pedestal at Hartford, the home of the stonecutter and of his discoverers, Dudley Warner, Senator Hawley, and, especially, Mark Twain.

Mosaics.

A. G. BAUDRY, formerly with Grey Vigeant, architect, has opened an office at room 24, 81 Clark street.

BERRY BROTHERS, manufacturers of varnishes, stains and lacquers, have just issued a vest memorandum tablet, illuminated with a fine steel portrait of Frances Cleveland; a neater or more artistic advertising device can hardly be conceived.

THE Gurney Hot Water Heater Company have appointed M. H. Johnson, at 140 Center street, New York City, and Ries & Whitacre Manufacturing Company, 42 and 44 West Monroe street, Chicago, selling agents for their hot water heaters.

THE Architectural League of New York has just issued a handsome edition containing list of officers, committees and members and the constitution and by-laws. It is from the *Art Age* press, and is in the height of typographical excellence.

MR. O. M. SHANNON, president of the Chicago Laundry Dryer Company, has left for New York and Brooklyn, where the company are putting in twenty stove heating clothes dryers, including a very large apparatus for the laundry room of the Brooklyn Bureau of Charities' new building.

THE Hendricks monument committee, at Indianapolis, have decided not to adopt a design submitted by sculptor Parks as they have not sufficient money to complete it but have decided to advertise for designs for a monument to cost not to exceed \$15,000. Mr. Parks it is reported will not submit a design in the competition.

ADVERTISERS like to receive returns from their advertising, and publishers are also gratified when such evidence comes to show the value of their publication as an advertising medium. The extent of the circulation of THE INLAND ARCHITECT is shown by a substantial order received a few days since by J. W. Taylor, the architectural photographer, from Australia.

THE Executive Committee of the Lincoln Monument Association, on September 6, opened the bids for repairing the Lincoln monument under the appropriation law of last winter. There were eight bids, the lowest being by E. F. Gobel, of Chicago, for \$9,333. From this figure the bids ran up as high as \$15,000. The work, which will occupy from sixty to ninety days, will begin immediately.

IN another column will be found the advertisement of D. Rosenberg & Sons' "Elasticia," a wood finish which, it is claimed, has all the good qualities of varnish finish for inside work, besides possessing a higher luster, greater resisting properties against atmospheric action and influences, is not liable to cracking, or easily scratched; all of which are very meritorious qualities, worthy of investigation.

ARCHITECT W. W. BOYINGTON is supervising extensive repairs on the Lincoln monument. The vast memorial pile has been going to decay so rapidly that it has been found necessary to introduce some radical changes in its details. Mr. Boyington intends to preserve the general features of the design, but much of the stone now in the monument will have to be removed and replaced by more enduring material.

THE Northwestern Terra Cotta Company are turning out a great number of orders, among the more prominent buildings being the Haymarket Theater, where the terra-cotta will be the same warm peachblow color as the entrance porch of stone; the Telephone building, Washington and Franklin streets; the Standard Club House; the residences of Robert Law, James L. Houghteling, W. H. Feingold. Every day passers-by stop to admire that vast construction, the new Rookery, LaSalle and Adams streets, and the terra-cotta ornamentation is one of the most admired features of the building. The effect is a rich lacework, adorning the salient features like the openings of door and window and the dividing lines of the colonnades;

furthermore—and this is an entire novelty in the use of this wonderfully serviceable and comprehensive material—the ironwork will be incased by terra-cotta, which will thus serve as the double purpose of fireproofing and ornamental finish at the same time. The Northwestern Company make a superb quality of terra-cotta, which excites the admiration of English architects as well as those of the United States.

FRANK C. SCHOENTHALER, who has been secretary of the Chicago Builders and Traders' Exchange since its organization, has resigned to fill an important position elsewhere. James John was appointed to fill his place as secretary until the next annual meeting. Mr. Schoenthaler filled the place of secretary not only with rare ability, but a large amount of the credit is due him for the influential position the exchange holds.

WHILE Mr. John Kelly, of the firm of Thomas Kelly & Bros., of Chicago, has been visiting the Pacific coast, seeing the sights and incidentally placing large orders for their specialty, the Kelly self-acting water-closet, Mr. Thomas Kelly has taken an eastern trip, and saw Boston and its environs, in company with Mr. E. Baggot, where he was warmly received and agreeably entertained by the plumbing fraternity of Boston.

SEYSEL and Neufchatel rock asphalte, derived from the bituminous limestones of the Val-de-Vers, is rapidly growing into public favor. It is observable that most of the Chicago leading architects have introduced it into their latest work, where stable floors, laundry floors, driveways, balcony roofs, etc., etc., form a part of the construction. The claims for this covering are: that it is equally durable over wood or brick; can be laid in the coldest weather; is water and fireproof; is non-absorbent; impervious to sewer-gas; creates neither dust nor mud; is hard and smooth, noiseless, light of color, dry and durable.

THE prospectus has been received of a school to be opened in St. Louis next November, under the name of "Academy of Architecture." An examination of the course of study offered discloses the fact that the instruction is such as will be of special aid to contractors and those employed in the several building trades rather than to architects; and the founder, in recognition of this, says in his opening sentence, that "This institution is intended to meet the wants of building tradesmen." Viewed in this light, the course of study and the moderate tuition fees, coupled with the winter session when the building trades are least active, render it certain that, if the instruction is of a high order, the school will accomplish a good work.

MR. MERCHANT, of Merchant & Co., of Philadelphia, has recently returned from England. It will be interesting to architects, builders, and roofers, to learn that the following arrangement has been made with the manufacturers:

In future every box of "Gilbertson's Old Method" and "Camaret" will be stamped with the average net weight on each box, as follows:

"GILBERTSON'S OLD METHOD" ROOFING PLATES.			
1C 14 x 20.....	120 lbs.	1C 20 x 28.....	240 lbs.
1X 14 x 20.....	148 "	1X 20 x 28.....	296 "
"CAMARET" ROOFING PLATES.			
1C 14 x 20.....	110 lbs.	1C 20 x 28.....	220 lbs.
1X 14 x 20.....	138 "	1X 20 x 28.....	276 "

The arrangement is also now in force that no wasters of either of the above brands will be sold to anyone in England, nor will they be shipped to the United States.

Messrs. Merchant & Co. claim that these plates are the heaviest made, and the action of the manufacturers in stamping the weight on each box will guarantee to consumers that the manufacturers mean to supply just what they claim. The efforts of this roofing plate firm to supply a thoroughly reliable article is commendable.

PROBABLY the largest contract ever made for steam boilers for stationary purposes has recently been awarded by the Edison Electric Illuminating Company, of New York, to the Babcock & Wilcox Company, for 8,700 horsepower of their water-tube boilers, to supply three new central stations now in process of erection in the city of New York. It is expected that with economical engines these boilers will develop an indicated horsepower of not less than 15,000, which is greater than that of the most powerful steamship afloat, the Umbria, which has developed 13,000 indicated horsepower. The awarding of this contract to the Babcock & Wilcox Company is a merited compliment to their system of water-tube steam boilers, particularly as this is the thirty-fifth order received from the different Edison companies for boilers for electric lighting purposes. The Pearl street station has been running nearly six years with 900 rated horsepower of the same kind of boilers, which, according to Mr. C. E. Chinnock (one of the Construction Committee of the Edison Company, and who is also the vice-president of the Edison United Manufacturing Company) have given the most perfect satisfaction, and have cost practically nothing for repairs in that time; that they have been called upon frequently to furnish a capacity fully sixty per cent above their rated power, and they have never failed in any case to respond generously with perfectly dry steam. After six years of such experience as this, joined with experience in a large number of other stations in this country and in Europe, it is no wonder that the preference was given to this boiler for these new stations, which are to be the largest electric lighting stations in the world.

SOME time ago the board of directors of the Union League Club received a proposition from a number of prominent members for the establishment of an Auxiliary Art Association. The proposition was placed in the hands of a committee composed of Messrs. Thomas B. Bryan, Charles E. Billin, John W. Root, Max A. Meyer, F. H. Head and J. W. Palmer, who at once addressed letters to all members of the club explaining the nature of the plan and inviting them to join the association. Members of the club only will be admitted to membership in the art association. The intention is not to set apart a room in the club house to be devoted solely to the uses of an art gallery, as several clubs in this city have done, but to follow the example of the Union League Club of Philadelphia, which formed such an association several years ago, and has thereby been able to line its walls with many thousands of dollars' worth of valuable paintings and other works of art. There is so much vacant space that were the club to undertake to cover it all at once with the kind of works that would be appro-

priate, the treasurer would be obliged to issue bonds to foot the bill. The plan, therefore, that has been decided upon is to form an auxiliary association, the yearly membership dues of which shall be devoted to the purchase of art works. These dues have been fixed at \$5 per year, and as it is expected that at least sixty per cent of the club's members will join there will be a fund of \$2,000 or \$3,000 every year which can be devoted to the purchase of pictures. The art association will elect its own officers and adopt rules for its own government. It is the present intention to purchase at least one valuable painting each year, though the promoters of the scheme are not ambitious that the club shall compete in this regard with the older galleries of the country. They are rather desirous of promoting the interests of home artists by purchasing their pictures and establishing prizes which shall tend to encourage emulation.

Railroads.

THE St. Louis, Fort Scott & Wichita Railway is a favorite route for parties going to western and southern Kansas, especially to Wichita, the "Magic City," as it is called. The trains run through by daylight, giving excellent facilities for seeing the country. Stop-over tickets are sold, and the officers are polite and attentive.

THE Burlington Route, C. B. & Q. R. R., will sell, on August 30, September 20, and October 11, harvest excursion tickets at one fare for the round trip to principal points in Nebraska, Kansas, Minnesota and Dakota. Limit, thirty days. For tickets and further information concerning these excursions, call on the nearest C. B. & Q. ticket agent.

THE Chicago, Burlington & Northern will build a road into Dakota, beginning work in the spring. The line will start either at Dubuque or Lansing, Iowa. It is said that this road has been surveying a direct line from St. Paul to Duluth, and that the line surveyed is 20½ miles shorter than the St. Paul & Duluth's new line. A line of this road is to be built from Canton, Dak., to connect with the Burlington, and to be extended to Centerville on the south, to meet the Northwestern. The new line is known as the Canton, Burlington & Northern. The capital stock is \$800,000.

THE Missouri Pacific Railway, of Missouri, with its branch, the St. Louis & Iron Mountain Railway and extensions, is now one of the greatest railway systems in the world. Five separate trains daily are run from St. Louis to the West and Southwest, reaching all leading points from Galveston to San Francisco and between, expeditiously, promptly and with admirable regularity. The reclining chair cars, sleepers and all the appointments of this vast system are the finest to be found in the United States, the trainmen are uniformed and every provision is made for the safety, comfort and enjoyment of its passengers, and, a notable fact, there are remarkably few accidents.

COMMENCING August 28, the new yet popular railway line to the Northwest, the Wisconsin Central, put on a new fast evening train, which is certain to be accepted with great favor by the traveling public in general, and particularly that portion which is obliged to economize upon the point of time. At the time that the announcement was made that the running time of railway trains over several lines between Chicago and St. Paul was to be shortened much curiosity was manifested as to the probable course of the Wisconsin Central. People thus interested were not forgetful of the fact, however, that the Wisconsin Central has, from the day of its opening for through business, invariably been the first to make a move which was likely to result in substantial benefit to its large list of regular patrons and the traveling public in general. It was thereupon decided by the Central people to put on a daily train leaving Chicago at 4 P.M. and arriving at St. Paul at 7:15 the next morning. The great advantage of this plan, as no few will readily see and appreciate, is that passengers will be landed in St. Paul or Minneapolis at an hour in the morning which enables them to meet merchants and business men before the day's rush of business has come on. It also enables one to have the entire day in those cities, and then, by taking the Wisconsin Central's south-bound train at a little past 7 o'clock, he will be landed in Chicago in time for attention to business affairs here the next morning, thereby having lost, or rather devoted, but but one day to the trip. In placing this train in service the Central's officials are not forgetful of the accommodations and comforts which have made their line the favorite with travelers, and will run thereon a through sleeper between Chicago and St. Paul and Minneapolis, as well as one between this city and Duluth. The dining-car service is also included in the new arrangement, and, in fact, everything has been provided which goes to make up a thorough and first-class service. Merchants and business men are not slow to make note of these very important facts as a rule, and they will undoubtedly not be in this instance.

Interior Furnishing.

THE period which marked the revolution or sharp advancement in the furnishing of homes in the United States commenced soon after the World's Exposition at Philadelphia in 1876. Chicago, at that time and since, probably more than any other American city, has been peculiarly situated, owing to the large area of homes destroyed by fire, and to its very rapid growth, to adopt modern ideas in architecture and modern furnishing.

Marshall Field & Co., through their retail carpet and upholstery departments, have not only recognized the demand for advanced ideas in these goods, but have been influential by their progressive methods in cultivating the general public to a better appreciation of thoroughly correct designs and colors as applied to carpets, rugs and upholstery.

A sketch is presented in this issue of part of their carpet and rug departments, from which readers may get a fair idea of the mammoth stock carried. The entire floor, which is devoted to these two departments, is considered the finest one floor in the world for the display of such goods, and a visit to this department will not only prove interesting to the visitor or purchaser, but instructive as well.

The Exposition Exhibition.

WITH due deference to the monetary and material phase of progress in the Interstate Industrial Exposition, its vital spark of interest to the citizen of Chicago is the art department. In this connection it is a pleasure to chronicle art is herself again at the Exposition.

Miss Sara T. Hallowell, who has frequently displayed her masterly qualities as a generalissimo in collecting and conducting this department, again has charge of it; and in her artistic effort has been liberally aided and abetted by the art committee: James H. Dole, chairman; C. L. Hutchinson, Henry Field, George Mason, and J. P. Reynolds. Great expectations have been amply fulfilled, and the result is the most interesting exhibition of a decade is now open for inspection.

The annual recurrence of this exhibition inspires brief retrospection, not only as to the class of work displayed, but its potency as an educational factor in formulating taste and furnish a large and varied field to draw from. They certainly provide an incentive for the art idea, for urging all men to guard what each desires to gain.

The powerful primary impression of the exhibition is its uniformity of excellence. There are surprisingly few weak pictures, and possibly the bad ones are only so by comparison. A secondary item of interest is the unusual number of large pictures bearing the fresh laurels of the Parisian salon, that have the impression of modern French influence, and last but not least, in fact the standard element of interest, is the Seney collection.

George I. Seney, of Brooklyn, N. Y., has a famous collection of pictures, and has kindly loaned over one hundred of them to this exhibition. It comprises many of the modern French masters, Corot, Barye, Pasini, Rosa Bonheur, Laurens, Bouguereau, Jules Breton, Cazin, Daubigny, Millet, Diaz, De Neuville, Jacque, Isabey, Kraus, Israels, Munkacsy, Henner, L'Hermitte, Rousseau, Constant, Troyon, and many others. Of pictures not French Mr. Seney has sent examples of the German Achenbach, Defregger, Van Marck, Mauve, the English Boughton, and the Americans Inness, Fuller and Chase. They furnish a fund of interest and information as masterpieces, and a delightful comparative study. The younger American school, practically Parisian through French influence, has among its conspicuous exhibitors Charles Sprague Pearce, Edwin E. Simmons, E. L. Weeks, Julian Story, F. M. Boggs, Alexander Harrison, F. A. Bridgman, C. S. Reinhart, and W. H. Howe. The representative American artists who have boldness of conviction to be entirely free from forcing influence are led by Eastman Johnson, John La Farge, George Inness, J. Carroll Beckwith, J. Frances Murphy, F. W. Tryon, William Sartain, A. H. Wyant, F. L. Kirkpatrick, W. T. Richards, Thomas Hovenden, F. D. Millet, William M. Chase, J. A. Monks, Arthur Parton, J. G. Brown, Edward Moran, Albert Bierstadt, and George Fuller. Among the 175 American artists represented thirty are located in this city. Miss Annie Shaw, whose very recent death deprived the art circle of one of its most capable members, is well represented by two landscapes that take an interest as the last work from her brush. Among the others are G. W. Platt, H. E. C. Peterson, H. V. Maratta, Mrs. M. K. Lusk, N. Ledochowski, N. P. Harrison, Ellen A. Holmes, Dennett Grover, Mrs. M. A. Gardin, William Chesman, Ida Burgess, P. Baumgrass, Mrs. E. L. S. Adams, D. F. Bigelow, and L. C. Earle. This fairly furnishes the interesting and varied composition of the exhibition.

The industrial exhibit is better this year than last; one that will greatly interest architects being a display of clay-working machinery.

Synopsis of Building News.

Arkansas City, Kan.—Architect Chas. S. Sedgwick, of Minneapolis, Minn., reports: Sandstone and terra-cotta residence, 55 by 73 feet, tile roof, plate glass, hard-wood finish, etc.; cost \$30,000; under way.

Austin, Ill.—Architect F. R. Shock, of Chicago, reports: For the Library Association, two two-story and basement frame buildings; cost \$25,000.

Belding, Mich.—Architect Claire Allen, of Ionia, reports: For H. J. Leonard, two-story stone front business block, 24 by 84 feet; plate glass, etc.; cost \$4,000; contract not let.

Bonanza, Mich.—Architect Claire Allen, of Ionia, reports: For Miner & Son's two-story brick hotel, 38 by 80 feet; cost \$4,000; contract not let.

Chicago, Ill.—Architects Flanders & Zimmerman report: For Jacob Beidler, six-story brick warehouse, 100 by 187 feet, terra-cotta and blue Bedford stone trimmings; cost \$150,000. For D. J. Harris, two-story residence, 25 by 70 feet, stone; cost \$10,000.

Architects Treat & Foltz report: For J. J. Simmons, two two-story and basement and attic dwellings, 42 by 58 feet, pressed brick, stone and terra-cotta; cost \$15,000.

Architect H. R. Wilson reports: For himself, three three-story and basement residences, 20 by 70 feet, Salem stone front; cost \$24,000; Geo. Lehman, mason; Philip Baillagoeon, carpenter. For F. V. Turner, four-story brick and stone apartment building, 40 by 40 feet; cost \$12,000.

Architect C. M. Palmer reports: For H. McGunn, three-story and basement livery stable, 50 by 132 feet, stone front; cost \$15,000.

Architects Edbrooke & Burnham report: For F. W. Campbell, five two-story and basement dwellings, pressed brick and stone; cost \$12,000. For M. Wolff, five two-story and basement dwellings, pressed brick and stone; cost \$14,000. For Joseph Alcock, three-story and basement store and flat building; cost \$10,000.

Architect F. V. Wadskier reports: For W. L. De Wolf, three-story and basement flat building, 135 by 83 feet, pressed brick, stone and terra-cotta; cost \$40,000. For John Brennock, three-story and basement store and flat building, 113 by 62 feet, pressed brick, stone and terra-cotta; cost \$35,000. For Judge L. B. Otis, two-story and basement and attic residence, 35 by 75 feet, stone front; cost \$35,000. For Geo. L. Otis, three-story and basement stone front residence, 30 by 80 feet; cost \$20,000. Also four-story and basement store building on Franklin, near Randolph street; cost \$16,000. For William Luff, residence at Oak Park; cost \$6,000.

Architect S. V. Shipman reports: For A. M. Fuller, block of six two-story and attic dwellings, 62 by 121 feet, pressed brick and brownstone; cost \$28,000.

Architect Edward Baumann reports: For Zeese & Conkey, seven-story and basement manufacturing building, 121 by 67 feet; cost \$80,000.

Architect Fred. Baumann reports: For the Bodie Estate, six-story building, 99 by 148 feet; cost \$130,000.

Architect Geo. L. Scoville reports: For Mrs. J. B. Marshall, two-story dwelling, 22 by 42 feet; cost \$4,000.

Architects Schaub & Berlin report: For F. Koepke, three-story and basement apartment building, 24 by 70 feet; cost \$6,000. For Henry Steppe, two-story and attic and basement dwelling, 25 by 62 feet, pressed brick and brownstone; cost \$5,000.

Architects Holabird & Roche report: For L. D. Webster, four-story store, office and hall building, 50 by 170 feet; cost \$60,000. For J. R. Walker, three-story and basement residence, 40 by 80 feet; cost not estimated.

Architects Jenney & Otis report: For Ferd. W. Peck, three-story and basement residence, 35 by 75 feet, 1826 Michigan avenue, spruce hued granite, Spanish tile roof, also stable; cost \$50,000; John Angas, mason; J. F. Reese, carpenter; Hallowell Granite Co., granite work.

Architect L. B. Dixon reports: For J. E. Beifield, four stone front dwellings, 120 by 60 feet; cost \$35,000.

Architect W. G. Barfield reports: For School Board, Lake View, three-story brick and stone school building at Gross Park; cost \$40,000. For S. G. McAdam, two-story and attic brick dwelling, 25 by 60 feet; cost \$9,000. For J. C. Ferguson, three-story and attic dwelling, brick and brownstone; cost \$8,000.

Architect C. O. Hansen reports: For S. D. Johnson, two-story and basement and attic residence, 28 by 52 feet, pressed brick, brownstone and terra-cotta; cost \$10,000. For H. Johnson, two-story store and flat building, 52 by 72 feet, pressed brick and stone; cost \$16,000. For B. Christensen, four-story and basement store and flat building, 25 by 100 feet, pressed brick, brownstone and terra-cotta; cost \$14,000.

Architect H. B. Seeley reports: For F. P. Owings, six-story building, 43 by 82 feet; cost \$30,000.

Architect F. R. Shock reports: For J. J. Lindley, stone front residence; cost \$12,000. For T. R. Willard, two-story and basement flats, 25 by 75 feet, pressed brick and stone; cost \$7,500. For E. M. Brooks, three-story and basement stone front apartment building, 40 by 70 feet; cost \$8,000.

Architects McAfee & Lively report: For H. H. Walker, ten two-story cottages at Brighton; cost \$25,000. For Chas. Willard, frame residence at Crystal Lake; cost \$7,000.

Architect Joseph L. Silsbee reports: For W. E. Stiles, two-story frame residence; cost \$6,000. For G. R. Phillips, two-story frame residence; cost \$13,000. For Mrs. A. S. Piper, two dwellings, 50 by 70 feet; artesian stone fronts; cost \$20,000.

Architect C. E. Lohman reports: For N. Hansen, three-story and basement brick and stone building, 26 by 71 feet; cost \$8,000; nearly completed. For C. Ottesen, three-story building, 21 by 68 feet; cost \$5,000; not let. For C. Jansen, three-story building, 21 by 72 feet; cost \$6,000; under way. For E. J. Jacobson, three-story building, 21 by 52 feet; cost \$7,000; under way. For Miss Gibbons, three-story brick, 22 by 72 feet; cost \$6,500; under way. For Mrs. M. Burns, three-story brick, 24 by 73 feet; cost \$7,300; under way. For M. B. Hansen, three-story brick, 22 by 70 feet; taking bids.

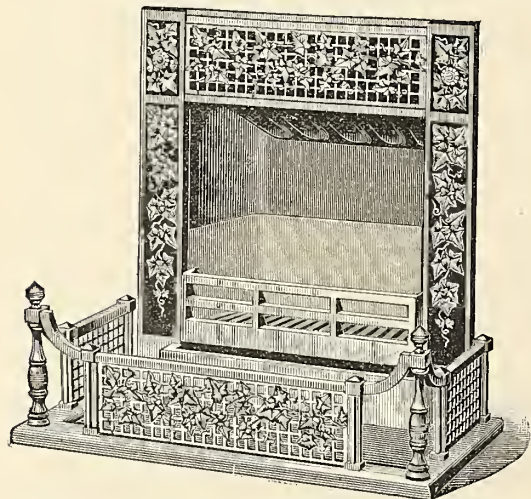
Cincinnati, Ohio.—Reported by Mr. Lawrence Mendenhall: As the summer season draws to a close there is the usual extra activity to push buildings forward and have them ready for interior finishing before the cold weather comes on.

While fall prospects have been worse, yet they cannot be called altogether satisfactory, certainly not what were expected.

The nine-hour resolution of our builders' exchange does not accomplish its intended ends, namely, that of establishing a uniform time of labor, from the fact that some of the influential members, notwithstanding their vote sustaining it, are not living up to it. By

[Continued on page XIV.]

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Greatest variety of rich and chaste designs in plain or oxidized Iron, Steel, Nickel-Plate, Electro-Bronze, Solid Brass or Bronze. Largest rooms in coldest climates thoroughly heated. Out-door air warmed by the heat wasted in ordinary grates, and introduced, producing perfect ventilation and equable temperature, without drafts. In use everywhere. Illustrated Catalogues.

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THIS is the perfected form of portable Roofing, manufactured by us for the past twenty-seven years, and is now in use upon roofs of Factories, Foundries, Cotton Gins, Chemical Works, Railroad Bridges, Cars, Steamboat Decks, etc., in all parts of the world.

Supplied ready for use, in rolls containing 200 square feet, and weighs, with Asbestos Roof Coating, about 85 pounds to 100 square feet.

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 Molded Piston-Rod Packing, Rings, Gaskets,
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effect hitherto unattainable, except at great cost. The Endolithic marbles are, without doubt, the latest and best material for Floors, Dados, Friezes, Bathroom and Vestibule Walls, Mantel Facings and Hearths, etc. They can be decorated with any design in permanent colors below the surface of the marble, and polished.

SEND FOR CIRCULAR.

[Continued from page 28.]

their course they are not only injuring the influence of their exchange, and themselves, but are laying an excellent cornerstone upon which to build a strike. Even at this writing there is an unsettled, uneasy state existing among the carpenters.

On August 8 five architects, Messrs. Samuel Hannaford & Sons, Jas. W. McLaughlin, Schureman & Kennedy, Chas. Crapsey, Buddeneyer, Plympton & Trowbridge, all from Cincinnati, submitted plans to the Army Commission for the new armory, and each plan showed careful study, also good taste in the interior arrangements.

Competition jobs, as generally conducted, are not satisfactory, at least to the defeated ones, and I am very sorry to say that quite a good deal of ill-feeling has been generated, which I trust time will heal. The point that galls the most is that the highest-priced plan was accepted, provided the estimate could be lowered, which was done, to bring it within \$9,000. Being an unprofessional man, and not "learned in the arts," I will not either criticize, condemn or praise, except to say that the firm which secured the prize stands high as to good work and honesty. In closing, however, let me say that the fairest manner in which to conduct all competitions is to submit designs to an expert, and allow him sufficient time in which to examine and pass upon them.

Architect Jas. W. McLaughlin is very busy on the plans and working drawings of the exposition building, to be erected over the canal, he having, as previously stated, secured that contract.

Ground will be broken shortly for the main exposition building, and all hands in Architect H. E. Siter's office are laying all over the boards, busily preparing the necessary drawings.

Wm. A. Lay has secured the contract for frescoing the amusement hall of the Central Ohio Insane Asylum, at Columbus, O.

Architect E. Anderson reports the following: The extension and remodeling of Andre's Opera House, at Connersville, Ind., is nearly completed. The city infirmaries have awarded contracts for a new colored ward and a ward for the toilers, at \$17,500 each. Mr. Anderson is engaged in the preparation of designs for an extensive barn for the same institution. The Cincinnati infirmaries has over seven hundred inmates. Additions to the Lindlow Grove schoolhouse, lately completed; plans for a villa residence for R. G. Hufford, at South Lebanon, O.; H. C. Furneaux, residence, Bellevue, Ky., and a number of others.

Architects Saml. Hannaford & Sons report the following: Brick schoolhouse in Winton Place, Ohio, two stories high, with slate roof; cost \$20,000. Residence for Chas. A. Ault, Wyoming, Ohio, frame, two and a half stories, 14 rooms, and slate roof. Residence for E. Shields, Esq., city, brick, with freestone trimmings, 8 rooms, and slate roof. Have been very busy on alterations and additions, but do not care to report them. The new City Hall and Armory plans are being rapidly pushed forward.

Architect Wm. S. Robinson, Mitchell building, reports as follows: Max Gibert, Esq., will build a brick house of 9 rooms, bath, etc., pine finish, slate roof; cost \$4,000. E. Galatti, Esq., Charleston, W. Va., will probably build a frame dwelling of 7 rooms, pine finish, with shingle roof; cost \$2,000. Wm. Bryan, Esq., will build a frame house of 9 rooms, pine finish, and slate roof; cost \$3,000. Time has been well occupied ever since his office was opened, and the fall prospects are reasonably encouraging.

Architect S. E. Des Jardins, reports the below-mentioned plans: G. W. Robson, Jr., Bellevue, Ky., will build a brick house of 10 rooms. First story will have hardwood finish, and the second story pine, slate roof; cost \$7,000. F. H. Cloud, city, will build a pressed brick residence of 10 rooms, with pine finish and slate roof; cost \$6,500. Mr. Des Jardins has refused several fine contracts, at least for the present, as about October 1 he expects to go abroad for three months. He will devote the greater part in visiting and studying the old cathedral towns of France, with their grand examples of both modern and ancient architecture. Mr. Des Jardins has made good progress as an industrious, painstaking architect, and we wish him "un bon voyage."

Columbus, Ga.—Architect Ernest Abshagen reports: For Hebrew Congregation, synagogue, 47 by 84 feet, pressed brick, stone and terra-cotta, slate tower, tin roof; cost \$15,000; nearly completed. Public school building, 70 by 95 feet, two stories, pressed brick and cutstone; cost \$17,000; contract not let. For Muscogee Manufacturing Co., five-story brick cotton mill, 150 by 50 feet, iron roof; cost \$30,000; under way. For Dr. Gautier, two-story frame residence, 31 by 57 feet; cost \$3,500; under way. For Mrs. F. A. Howard, two-story frame residence, 45 by 68 feet; cost \$4,850. For Dr. S. N. Jordan, frame dwelling, 33 by 34 feet; cost \$2,700; under way. For Muscogee Manufacturing Co., brick engine house, etc.; cost \$18,000; not yet commenced. Mr. Abshagen is also contractor for all that are let of the above.

Fergus Falls, Minn.—Architect Chas. S. Sedgwick, of Minneapolis, reports: For Congregational Society Church and Chapel, 57 by 80 feet, pressed brick veneer; cost \$15,000; under way; D. W. & C. Stanford, builders.

Fostoria, Ohio.—Architect F. K. Hewitt, of Tiffin, reports: For J. W. Davis, frame residence; cost \$6,500; under way. Brick and stone city hall and jail, four steel cells; cost \$4,500. For J. F. Heilmann, frame residence; cost \$4,000; under way. For R. Crocker, brick residence; cost \$7,500; under way.

Greenville, Pa.—Architect S. W. Foulk, of New Castle, reports: For C. R. Wray, frame dwelling; cost \$5,000; John Neel, builder.

Howell, Mich.—Architect Claire Allen, of Ionia, reports: For School Board, two two-story, brick schoolhouses, 42 by 58 feet; cost \$4,000 each; contract not let.

Hutchinson, Kan.—Architect Seymour Davis, of Topeka, reports: The First Presbyterian Church, 50 by 60 feet, rock-faced stone, is nearing completion; cost \$20,000.

Independence, Mo.—Architect S. W. Foulk, of New Castle, Pa., reports: For Y. M. C. A., three-story brick building, 50 by 156 feet, stone and terra-cotta trimmings, slate roof; cost \$23,000.

Ionia, Mich.—Architect Claire Allen reports: Demand for building is fair, mechanics all busy at good wages. For R. Logan, two-story brick business block, 26 by 100 feet, cutstone front; cost \$5,000; contract not let.

Joliet, Ill.—Architect Julian Barnes reports: For the state, two three-story stone schoolhouses, 40 by 75 feet, at the Penitentiary; cost \$14,000; E. C. Brainard & Co., contractors; also several frame dwellings, ranging from \$1,500 to \$3,500 in cost.

Kansas City, Mo.—Architects James & James report: Very large amount of building in progress and projected. All contractors busy. Prospect of great activity this fall and in the spring. For Walton H. Holmes, five-story store and office building, 50 by 115 feet, brick and stone; cost \$50,000; roofed in; W. A. Kelly, general contractor; For Mrs. Longbridge, apartment block, 132 by 99 feet, brick and stone; cost \$50,000; projected. For T. A. Cookson, brick and frame residence, 28 by 50 feet; cost \$4,000; under way. Kreisher Bros., builders. For A. T. Garth, alterations, etc., to house; cost \$2,000; under way; A. J. Bonham, builder. For C. G. Hopkins, apartment house, 53 by 112 and 32 by 36 feet, brick and stone, seven stories and basement, elevators, steam heat, incandescent light, cold storage, etc.; cost \$100,000; foundation under way.

Knoxville, Tenn.—Architects Baumann Bros. report: For J. O. Lotspeich, two-story frame, 46 by 62 feet, slate roof; cost \$3,500; under way; John Vinson, builder. For H. W. Woolf, two-story frame, 28 by 40 feet; cost \$2,500; under way; John Vinson, builder. For H. W. Curtis, two-story frame, 30 by 50 feet; cost \$5,000; under way; Stephenson, Gelaz & Co., builders. For F. A. R. Scott, two-story brick, 60 by 78 feet, slate roof; cost \$12,000; W. H. Dawn, builder. For Dr. J. M. Masters, two-story frame, 59 by 64 feet, slate roof; cost \$10,000; taking figures. For Dr. R. M. Rhea, two-story brick and marble, 46 by 60 feet; cost \$9,000; taking figures. For H. L. Moses, two-story frame, 29 by 32 feet; cost \$2,400; under way; John Vinson, builder. For J. W. Borches, two-story brick store, 22 by 75 feet; cost \$6,000; under way; L. A. Galyon, builder. For Coal Creek Coal Co., thirty three-room frame cottages, 16 by 50 feet; cost \$18,000; building by the day.

Lake Geneva, Wis.—Architect M. L. Beers, of Chicago, Ill.: For the Oakwood Retreat Association, pressed brick and stone fireproof hotel building, 106 by 110 feet; cost \$65,000.

Lawrence, Kan.—Architect Seymour Davis, of Topeka, reports: For Dr. C. V. Moltrain, three-story business college and academy building, 75 by 112 feet; pressed brick and red sandstone; elevators, electric bells and light, sanitary appliances complete; cost \$30,000; excavating.

Little Rock, Ark.—Architect B. J. Bartlett, for G. W. Shinn, brick veneered residence, 53 by 56 feet; terra-cotta trimmings, slate roof; estimated cost \$7,000; independent contractors.

Martin's Ferry, Ohio.—Architect Chas. S. Sedgwick, of Minneapolis, Minn., reports: For L. J. C. Drennen, frame residence, 29 by 54 feet; cost \$4,000; under way.

Mammoth Springs, Ark.—B. J. Bartlett, of Little Rock: For Mammoth Springs Improvement Co., brick business block, 50 by 100 feet; estimated cost \$8,000.

Marysville, Tenn.—Architects Baumann Bros., of Knoxville, report: Presbyterian church, 64 by 78 feet; brick, slate roof; cost \$10,000; receiving bids. For Joe Burger, two-story frame, 38 by 60 feet; cost \$7,500; under way; Moore & Co., builders.

Minneapolis, Minn.—Architect Chas. S. Sedgwick, reports: For Dexter Thurber, pressed brick veneer residence, 48 by 63 feet; cost \$15,000; under way; M. Clay, builder. For Judge J. M. Shaw, pressed brick residence, 47 by 58 feet; cost \$17,000; J. C. Stont, builder. For Mrs. E. M. Gill, frame residence, 34 by 53 feet; cost \$5,000; under way; Geo. W. Brown, builder. For C. C. Chase, frame residence, 36 by 58 feet; cost \$4,500; under way; G. S. Powell, builder. For Cable & McKean, frame residence, 36 by 58 feet; cost \$4,500; under way; G. S. Powell.

Architects Newhausen & Dustin, report: Building is very brisk, and outlook for the fall season is very encouraging. For M. Wyman, two-story brick store, 102 by 54 feet; cost \$9,600; under way; C. C. Zeigler, builder. For L. K. Lovejoy, frame dwelling, 28 by 56 feet; cost \$2,700; under way. For H. A. Westphal, two-story frame hall building, 44 by 90 feet; cost \$3,500; under way; G. C. Kenzie, builder. For Wm. Dresser, two-story brick store, 34 by 85 feet; cost \$8,000; under way; J. Knoblauch & Co., builders. For Wm. Dyer, three-story brick store, 24 by 70 feet; cost \$6,000; under way; J. Knoblauch & Co., builders. For Harris Bros., two-story brick tenement, 165 by 110 feet; cost \$20,000; projected. For A. Hornung, two-story frame store, 22 by 56 feet; under way; G. Muther, builder. For Glueck & Son, pressed brick residence, 36 by 68 feet; cost \$12,500; projected. For N. Pratt, frame dwelling, 35 by 62 feet; cost \$7,000; projected. For Geo. McCann, brick lively stable, 60 by 90 feet; cost \$6,000. Also brick basement, 62 by 54 feet; cost \$7,200; projected.

Architect Harry W. Jones reports: Much more substantial work being done than ever before. For Bank of Commerce, seven-story fireproof office building, 66 by 142 feet, brownstone; cost \$175,000; under way. For Dr. S. F. Stance, three-story brownstone residence, 40 by 80 feet, fireproof; cost \$25,000; under way. For E. P. Abbott, two-story frame residence, 30 by 50 feet; cost \$6,000; under way. For W. A. Barnes, stone residence, 30 by 50 feet; cost \$10,000; under way. For J. S. Sutcliffe, brick residence, 30 by 40 feet; cost \$8,000; under way. For T. E. Craft, frame dwelling; cost \$3,000. For E. M. Nesmith, frame dwelling; cost \$3,000.

New Castle, Pa.—Architect S. W. Foulk reports: For P. H. Phillips, brick and stone residence, ornamental brick and terra-cotta trimmings, slate roof, hardwood finish; cost \$16,000; J. M. Vance contractor. For M. J. Hanna, twelve-room frame dwelling, slate roof; cost \$5,600; R. M. Jamison, contractor. For E. A. Douan, seventeen-room frame dwelling, slate roof, hardwood finish; cost \$8,000. Also slate roof barn, 29 by 35 feet; cost \$950; R. M. Jamison, contractor. High school building, 75 by 92 feet, brick, stone and terra-cotta trimmings, slate roof, Smead system heating, ventilating and dry closet; cost \$21,000; Wm. Barnett, contractor. First M. E. Church building, 82 by 130 feet, pressed brick with stone and terra-cotta trimmings, slate roof; cost \$25,000; plan completed and foundation contract let to Charles Rowan. For Mrs. J. C. Hanna, double-dwelling; cost \$4,000; Geo. Bryant, contractor. For John Hill, dwelling; cost \$2,000; Wall Emery, contractor. For D. M. Cubison, remodeling hotel; cost \$11,000; Thomas Allen, contractor. Also several smaller buildings and works out of this city reported elsewhere.

New Corporations.—The Gem Hydrant Co., of Mansfield, O., has been incorporated; capital stock, \$60,000; Robt. A. McCarty, P. L. Teeple, F. Schreidt, Henry Yoe and Mason A. Noble, incorporators. The Lincoln Diamond Polish Co., of Lincoln, Ill., has been incorporated; capital stock, \$50,000; B. R. Andrews, John A. Lutz and T. T. Beach, incorporators. Automatic Safety Elevator Gate Co., of Rochester, N. Y., has been incorporated; capital stock, \$25,000; Carl J. S. Mensing, A. De Wayne Stickland and W. E. Stickland, incorporators. The New York Heating Co., of New York City, has been incorporated; capital stock, \$25,000; Theodor N. Vail, 95 Milk St., Boston, Mass., David B. Parker, Randolph & Delmore Elwell, Brooklyn, incorporators. The Brooklyn Heat and Power Co., of Brooklyn, has been incorporated; capital stock, \$25,000; David B. Parker, Randolph, Delmore Elwell and Wm. A. Vail, Brooklyn and Alex. Cameron, Orange, N. J., incorporators. The Roland Brick & Tile Co., of Roland, Iowa, has been incorporated; capital stock, \$6,000; Chas. Christian, president, B. M. Ras musen, secretary, and R. K. Beard, treasurer. The Warren Ehret Co., of Philadelphia, has been incorporated; capital stock, \$100,000; Alonzo Gibbons, Palmyra, N. J., incorporator. The Chicago Hydraulic Pressed Brick Co., of Chicago: capital stock, \$200,000; incorporators, E. C. Sterling, H. W. Eliot, William B. Dean, Wais Chauvenet and F. H. Dukes. The Otley Packing Cement Manufacturing Co., of Chicago: capital stock, \$100,000; incorporators, Samuel Otley, William Watkins and James Phelps.

Northfield, Mass.—Architect S. W. Foulk, of New Castle, Pennsylvania, reports: For Congregational Society, two-story brick, stone and frame church, 92 by 85 feet, slate roof; cost not given; plans finished.

Pittsburgh, Pa.—Architect S. W. Foulk, of New Castle, reports: For Rev. Mr. Chapman, two brick dwellings; cost, \$12,000; J. G. Weaver, contractor. For S. A. Tagart, brick dwelling, slate roof; cost, \$7,000; J. G. Weaver, contractor.

St. Louis, Mo.—Following are the most important building permits issued recently: Rosenheim & Frankenthal, seven-story brick business block, 90 by 130 feet; cost, \$125,000; contract sublet. J. T. Drummond, three-story brick warehouse, 44 by 85 feet; cost, \$20,000; Kirgin Bros., contractors. C. Pickel, three two-story stores and dwellings, 54 by 55 feet; cost, \$6,000; sublet. J. W. Clemens, two-story brick carriage factory, 50 by 109 feet; cost, \$3,000; Goesse & Remmers, builders. M. Proetz, two-story brick flats, 45 by 50 feet; cost, \$5,500; M. Proetz, builder. Anheuser & Busch Brewing Company, two-story brick dwelling, 47 by 60 feet; cost, \$10,000; sublet. Mrs. T. T. Wurm, two-story brick store and dwelling, 35 by 61 feet; cost, \$6,000; sublet. M. Slattery, four two-story brick dwellings, 23 by 62 feet; cost, \$7,000; E. Mackey, builder. G. P. Schaefer, two two-story brick stores and dwellings, 26 by 65 feet; cost, \$5,000; A. Dietz, builder. J. Wodraska, two two-story brick tenements, 18 by 51 feet; cost, \$5,200; F. Knittel, builder. Dr. T. O'Reilly, four two-story brick dwellings, 75 by 30 feet; cost, \$7,000; M. Kirkwood, builder. D. F. Kaime, eight two-story brick dwellings, 148 by 52 feet; cost, \$20,000; and four two-story dwellings, 68 by 50 feet; cost, \$12,500; sublet. M. E. Church, two-story brick church, 65 by 97 feet; cost, \$25,000; D. Evans, builder. Mrs. A. Mueller, four two-story brick dwellings, 50 by 44 feet; cost, \$5,000; F. Mueller, builder. St. Liborous' Church, stone basement, 75 by 100 feet; cost, \$18,200; F. Fehlig, builder. H. E. Frendly, two-story brick dwelling, 26 by 44 feet; cost, \$5,000; J. Gager, builder. Mrs. M. Pattison, two-story brick dwelling, 25 by 50 feet; cost, \$5,000; J. Gager, builder. L. D. Dazier, two two-story brick tenements, 57 by 51 feet; cost, \$5,600; Cook & Casey, builders.

St. Paul, Minn.—Architect C. A. Wallingford, reports: For St. Paul Park Company, eight frame residences; cost, \$2,000 each; fourteen dwellings; to cost, \$1,000 each; projected; Hotel, 40 by 80 feet; cost, \$12,000; under way; John Makinson, builder. For John Dow, frame residence; cost, \$7,000; projected. For Lucian Warner, frame residence; cost, \$10,000; projected.

Sterling, Kan.—Architect Seymour Davis, of Topeka, reports: Cooper Memorial College building, 50 by 120 feet, nearing completion; cost \$30,000.

Sweetwater, Tenn.—Architects Baumann Brothers, of Knoxville, report: Presbyterian Church, 49 by 60 feet, brick, slate roof; cost \$8,000; under way; Bina Young, builder.

Tiffin, Ohio.—Architect F. K. Hewitt reports: For R. D. Smeath, frame residence; cost \$3,300; under way. For Dr. J. W. Martin, brick block of three dwellings; cost \$4,600. Trinity Church, Sandusky limestone with Newark brownstone trimmings; cost \$20,000; under way. For John A. Hall, addition to store building; cost \$2,500; under way. For S. B. Smeath, remodeling residence; cost \$3,500; under way.

Topeka, Kan.—Architect Seymour Davis reports: Present condition and outlook for building is good. Have enough work in hand in Topeka and elsewhere to keep five men busy all winter, and work coming in every day. For Wilson Keith, completing four-story business building, 50 by 135 feet; cost \$30,000. For Ex-Gov. Crawford, four-story and basement office building, 50 by 100 feet, pressed brick and terra-cotta, elevators, steam heat and power, electric lights, etc.; cost \$30,000; plans completed. For E. Bennett, finishing pressed brick and terra-cotta residence; cost \$30,000. For J. K. Jones, four-story office building, 25 by 60 feet, Bedford stone front; cost \$10,000. For Dr. Henry W. Roby, office and residence, 25 by 60 feet; cost \$8,000; under way.

Vandale, Ark.—Architect B. J. Bartlett reports: For Cross county, court house, 60 by 56 feet, brick and stone; estimated cost \$15,000; let September 5; Thos. B. Smith, commissioner.

Warren, Ohio.—Architect S. W. Foulk, of New Castle, Pa., reports: Church of the Disciple, 60 by 130 feet, brick, stone, and terra-cotta trimmings; cost \$19,000.



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SUPPLEMENT—SEPTEMBER, 1887.

No. 3

CONTRACTORS ON PHENIX INSURANCE BUILDING.

The Phenix Insurance Company Building.

(Illustrated in this Number.)

AS illustrating the magnitude of the real estate transactions and other business interests of Chicago at the present time, even compared with ten years ago, it is interesting to state that during the summer of 1885 a telegram was received by the cashier of the National Bank of Illinois that \$200,000 had been deposited to their credit with their New York correspondent for use by the Phenix Insurance Company of Brooklyn, and shortly afterward one of the employes of that company asked if any money had been received. Cashier Hammond said yes, whereupon the other remarked that they had given a check for \$200,000 a few hours before as first payment for a lot at Jackson and Clark streets. Five years ago if any such amount of money were going to be transferred between New York and Chicago, arrangements would have been made for weeks beforehand. Subsequent installments for the McNeill lot rounded out the sum of \$400,000 as the price paid for the site of the magnificent office block just finished by the company at a cost of \$1,000,000.

The Phenix building was designed by the well-known architects, Messrs. Burnham & Root, of Chicago. It extends the entire block on Jackson street, opposite the Grand Pacific Hotel, from Clark street to Pacific avenue, and so has a frontage of 216.5 feet, while the depth on the other two thoroughfares is something over fifty feet. There are ten high stories—the topmost of which really contains two, with windows on all four sides, flooding with light the great space occupied by the Phenix company—and the external effect is admittedly one of the finest and most imposing presented by any business building in Chicago. The first two stories are of Vert Island stone. The third story is half of stone and half of brick, and above the third story it is entirely of brick and terra-cotta. The entrance, midway in the Jackson street front, has a clear span of twenty-four feet. The vestibule is 20 by 45 feet. The peculiarity of the treatment of the fronts is the large number of strongly marked and highly enriched bay windows, which extend from the third story up to the floor of the ninth inclusive, and give to the offices in which they open great additional depth and outlook on the street. The cornice is in the form of a strongly projecting balcony, with richly carved parapet, which extends around on the level of the tenth-story floor, and on this balcony all the windows of the general offices of the company open. The two lower stories, of pinkstone, are closely related to each other in general grouping, the third story is isolated, the fourth and fifth stories are grouped together, and the sixth, seventh, eighth and ninth are thrown in one large grouping. The tall story, fully twenty-two feet high, occupied by the company, is strongly accented in the design of the fronts, and the interior space is not broken by a single column.

If the exterior is harmonious in design and color, on passing within the great arch of entrance you cannot but admire still the strength and delicacy of outline and treatment. White marble everywhere in the grand entrance, in the massive steps, in the elevator arch, along every hallway, the glowing surfaces reflecting and still more multiplying the shafts of light from the scores of plate-glass windows. All the offices are in plain arrangement, finished in Cuba mahogany. The nine tiers of Phenix offices are among the most secure, the most thoroughly and elegantly finished, and the best lighted to be found anywhere.

Edward Sturtevant executed the masonry contract, a statement that forestalls comment upon its character. Mr. Sturtevant's services have built up Jackson street continuously for blocks, the adjoining Board of Trade building being another exhibit of his workmanship, as is many another of our chief structures.

St. Louis pressed brick could not have a better monument than the Phenix building, the extensive contract being filled by Lockwood & Kimbell, of Chicago, the well-known dealers in this material, as also Trenton, Philadelphia, Zanesville, Milwaukee, and the other fine grades of pressed brick, which they ship by the carload throughout the Northwest and the

country. The St. Louis brick, always a favorite in Chicago, is found in an increasingly large number of our buildings, and this is true everywhere, the new addition to the company's plant at St. Louis being arranged to turn out 20,000,000 brick next season.

The Northwestern Terra-Cotta Company of True, Hottinger & Co.—city office in McCormick block—have a special compliment in the Phenix building. Anything finer than the terra-cotta display in the enriched bow windows cannot be found in Chicago, and the same artistic design and finished execution mark all their product throughout the building, indeed throughout the city.

The beautiful and extensive marble work already referred to was supplied by Davidson & Sons, foot of North Market street, the well-known contractors for marble and granite work and interior marble decorations. Few are the mammoth office buildings in the Board of Trade district that this firm has not embellished, and the same is true of our finest residences. They have just been given the contract to do the interior marble work on the State, War, and Navy Department buildings at Washington.

The elevator fronts, the staircase, the gallery work in the ninth story, the ironwork in the main entrance, and the vestibule have all been furnished by Paulsen & Eger, of New York, finished in their well-known oxidized iron process and electro-bronzing, rendering it highly ornamental and beautiful in finish, carrying out so well the design of the architects, Messrs. Robbins & Talcott, of Chicago, their general western agents, and the beautiful workmanship is being popularized in an extensive manner, corresponding with its unique attractiveness.

The hardware is all special, being manufactured by the Yale & Towne Manufacturing Company from designs by the architects for this particular building, and the contract was intrusted to Orr & Lockett, who make a specialty of this fine work and have furnished nearly all our large office buildings.

Joseph Eastman, the contractor for the plastering, has given great satisfaction in the way he has pushed the work through.

The painting, glazing, and hardwood finish by S. S. Barry & Son, Nos. 258-60 Wabash avenue, has been so well completed that even the mahogany shows how their handiwork is required to give additional luster and finish to that beautiful and costly wood. They are one of the oldest and best known concerns in the painting and wood finishing in the city, and stand among those most relied upon by architects for perfect work.

The Phenix Building is lighted throughout by the Edison incandescent light.

There are five of W. E. Hale & Co's fine passenger elevators in the Phenix Building. In finish and in service they are among the best in the city.

The gas and electric fixtures were furnished by T. W. Wilmarth & Co., Nos. 225 and 227 State street, and are finished in dark copper bronze to match the other metal work. The two standards which light the main entrance are truly works of art, being made from special designs furnished by Burnham & Root, forming in their uniqueness a rich contrast with the elegant surroundings. The electriciers for the general offices for the Phenix Company, situated in the top of the building, are made in the form of a corona, having sixteen lights each, the metal work finished in a rich gold color, relieved with polished marble and onyx. The woodwork, which forms the interior finish, and including the office, desks, etc., is all in Cuba mahogany, and was furnished and fitted by Edward E. Swiney, No. 65 West Washington street, showing artistic work throughout. The beautiful Vert Island sandstone, as seen in the fronting exterior walls, were supplied by Mr. Henry Kerber, whose yards and office are at No. 340 Fifth avenue. Each office is fitted with washstands, which, with the water-closet, fixtures, etc., are furnished by the J. L. Mott Iron Works, of New York.

As an office building for office purposes the Phenix Company have gone further than any other corporation in the West, in placing an elegant finish in a building devoted to purely commercial purposes, an example that will be followed until art will find a place where before rough walls and plain finish was considered all that was necessary.

CONTRACTORS ON PHENIX INSURANCE BUILDING.

Passenger Elevators.

THE elevator system of our modern large buildings has become of such an importance to the structure that owners and architects have to exercise great judgment in selecting the best, realizing that the renting of the upper floors depends on a safe and rapid transit. This has been so well understood lately that, instead of small elevators, hidden in some corner of the building, occupying space least valuable for renting, we have now large and palatial vestibules, the main feature of which is the entrance to the elevators. The five elevators in the Phoenix building, as shown in the photogravure of the entrance interior, are constructed with the latest improvements, and are models of the cabinetmakers' art. A trip on them will convince the most skeptic that they combine the qualities of swiftness and smoothness of running, and that all the modern devices for safety have been provided. It must be gratifying to W. E. Hale & Co. to add the Phoenix to the long list of prominent buildings in which the Hale Hydraulic Elevator has been placed.

It is worthy of note that the Phoenix people have sought to make this building as notable as the company it is built for, and it is understood that in this building, to a greater degree than in any other, the disposition was to give the preference to the quality of material, without the usual regard for the lowest figure. This fact makes all contracts doubly complimentary to those who, both in figures and material, were successful in placing a contract in this magnificent building.

Hardware.

WHILE other office buildings have been handsomely fitted with hardware trimmings, the Phoenix is the first in the West for which special designs were made and executed, and which are to be used on no other building. These designs were made by Architect John W. Root, and executed by the Yale & Towne Manufacturing Company for Messrs. Orr & Lockett, who furnished the hardware trimmings for the entire building. The leading architects of today are those who realize that people of culture, desiring some other considerations beyond those of mere architectural effect, should receive attention in the construction of their buildings, and that the internal arrangement, convenience and finish, including the smallest details, should be looked after with equal anxiety, thereby securing an attractive and harmonious whole, which will bear the test of close scrutiny and render adverse criticism difficult, if not impossible. The Yale & Towne Manufacturing Company, which for many years enjoyed, and still holds, the reputation at home and abroad of being the makers of the finest and most secure locks ever produced, were finally prevailed upon by the requests of many leading architects to enter the field as manufacturers of fine builders' hardware. How well it has earned the confidence placed in it, and how much better work it has accomplished in this direction, is best shown in the handsome hardware to be seen in the Phoenix building.

Messrs. Orr & Lockett, the contractors for the hardware, who have gained their experience by supplying almost every building, private and public, that has called for special hardware, had the full confidence of the architects as to their ability to carry out the designs, and intrusted the order to the manufacturers with the understanding that the designs should not be duplicated. This idea of securing private patterns should be initiated on all buildings where harmonious effect is sought, and opens a wide field for artistic designs, which should become popular with architects. The material used throughout the building is old copper, to match the mahogany woodwork and contrast with the marble wainscoting and floors. The entire hardware outfit is certainly one of, if not the very best in any office building in the country, and clearly demonstrates that the possibility for the production of artistic hardware in any kind or description of metal is only limited to the ingenuity of the designer and the capability of the manufacturers. But in order to carry out this idea it is absolutely necessary to intrust this work to persons whose long experience in this class of work enables them to carefully overlook and supervise its execution and application, and thoroughly enter into the spirit of the architect or designer. It is in the observance of this fact and the personal attention to details that characterizes the firm of Orr & Lockett, that architects intrust to them with full confidence the most important contracts, as proven by the fact that to them has been awarded the contracts for most of our principal buildings—the last of which, though not the least, being the Rookery, on which contract they are now engaged.

It should not be inferred by the above that their success in this specialty has been confined to these large office contracts, as the majority of our handsome modern residences have been supplied with artistic hardware by this firm.

Special Notice.

THE HYDRAULIC

PRESS BRICK COMPANY

304 N. 8th Street, St. Louis,

—ARE NOW—

Enlarging their Works,

And will manufacture during the Year 1888,

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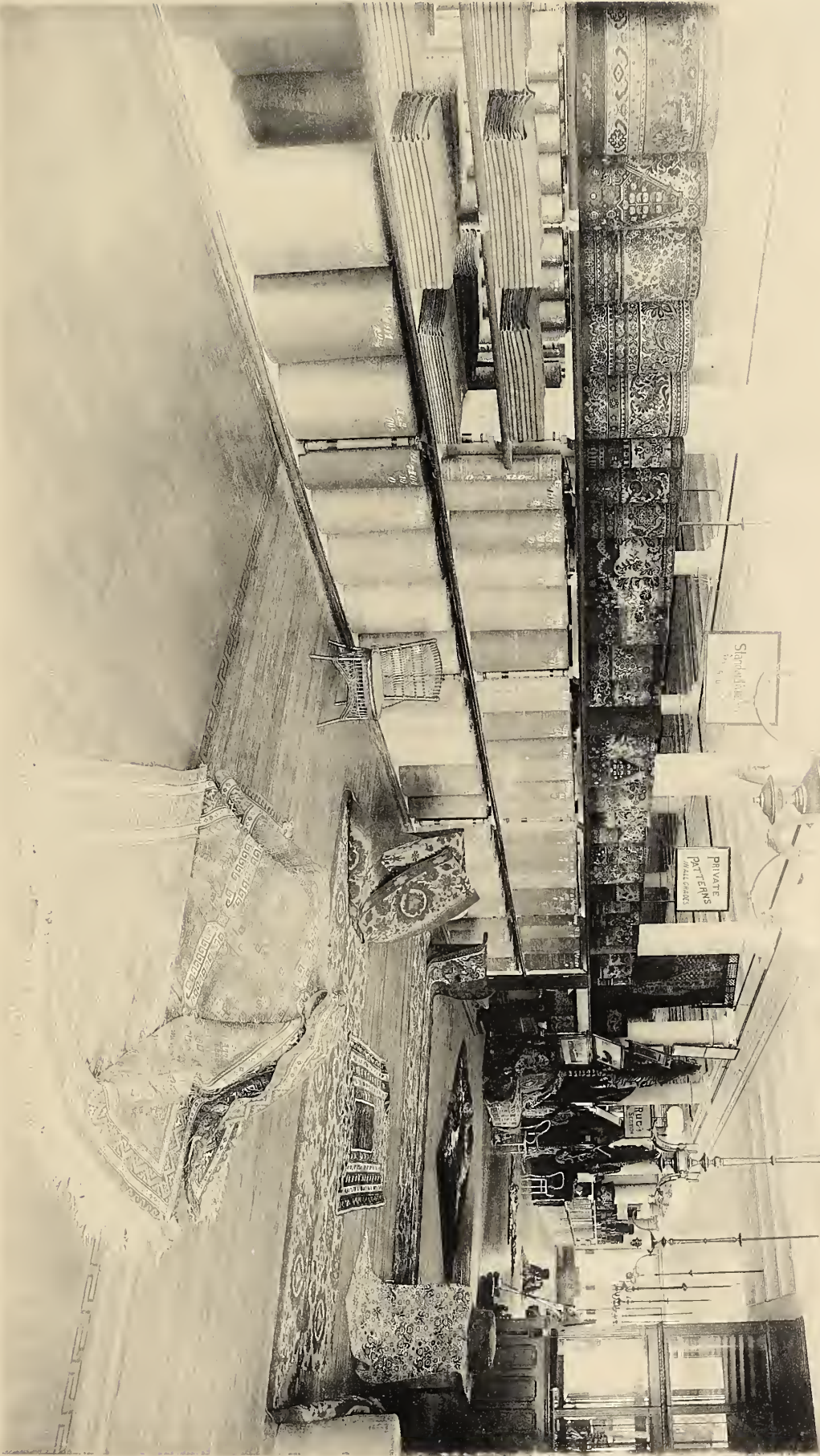
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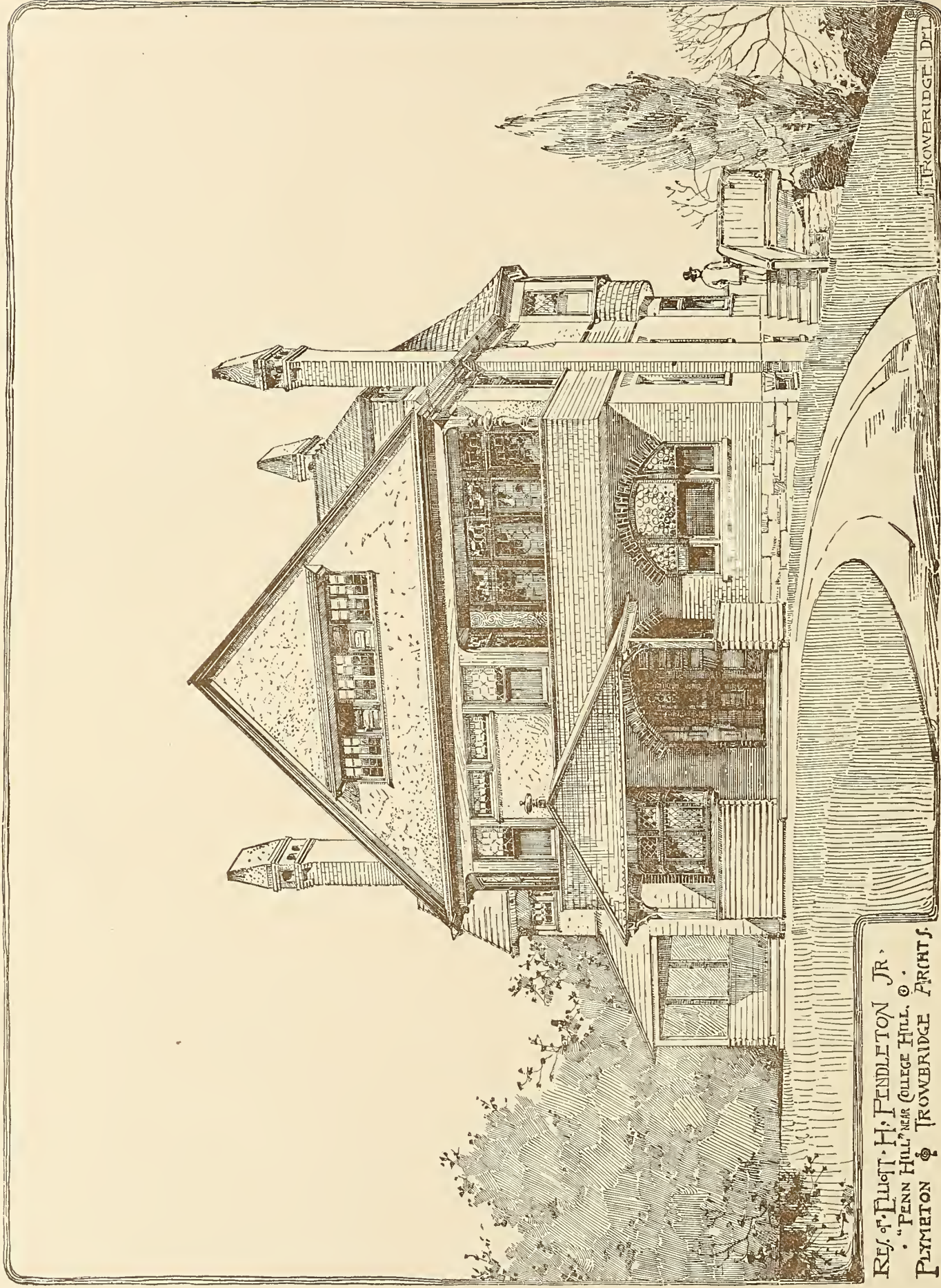
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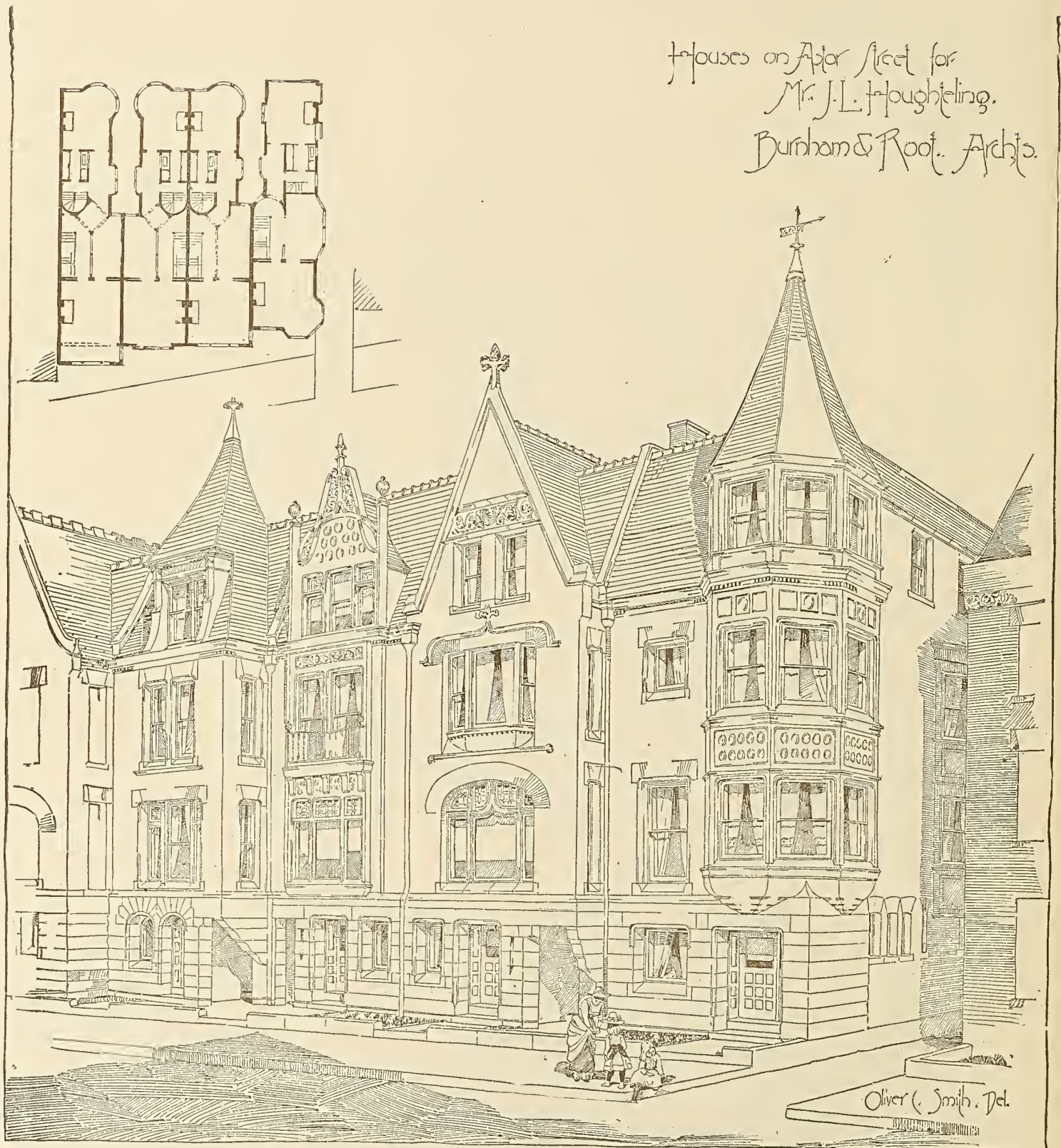
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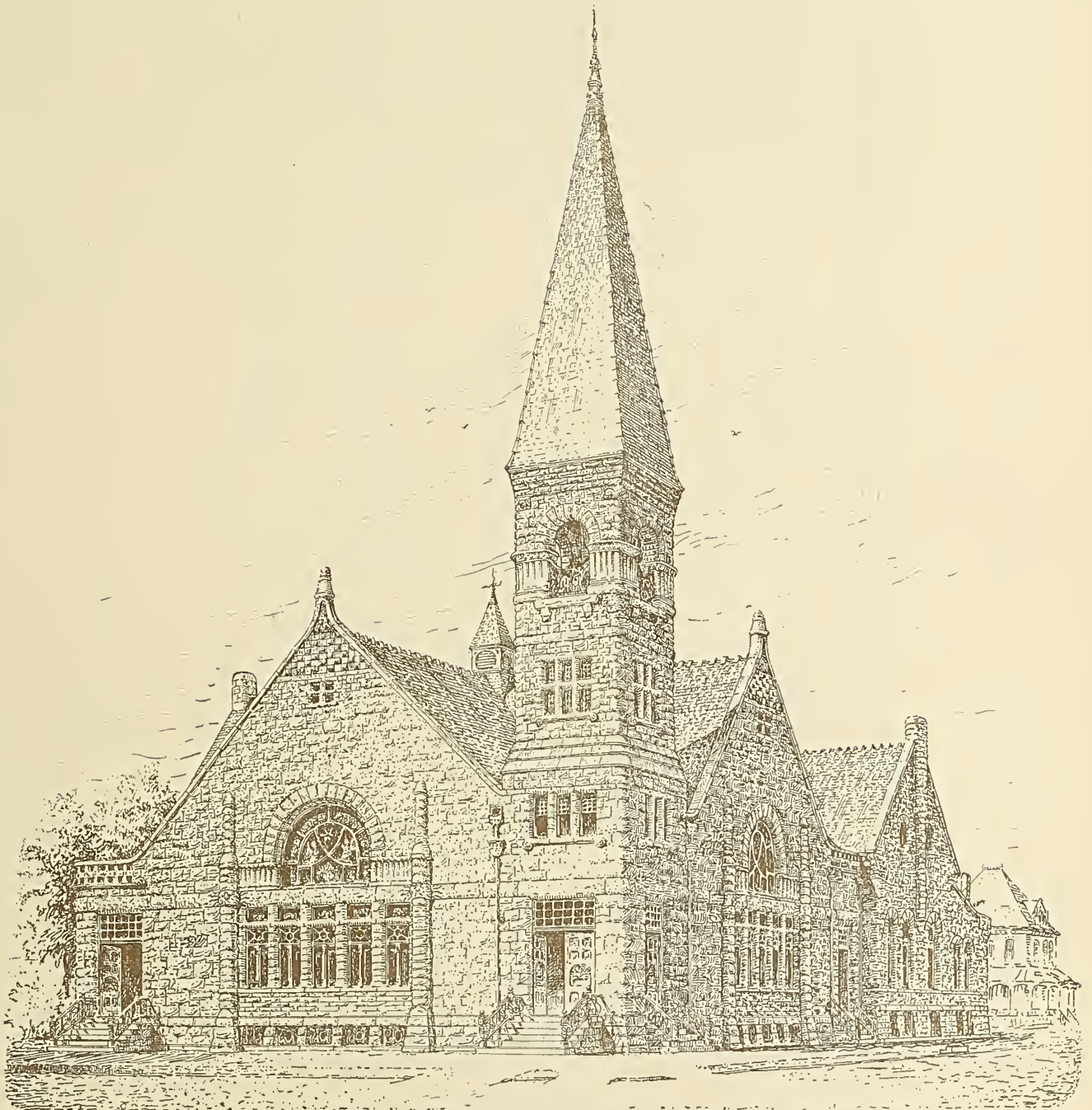
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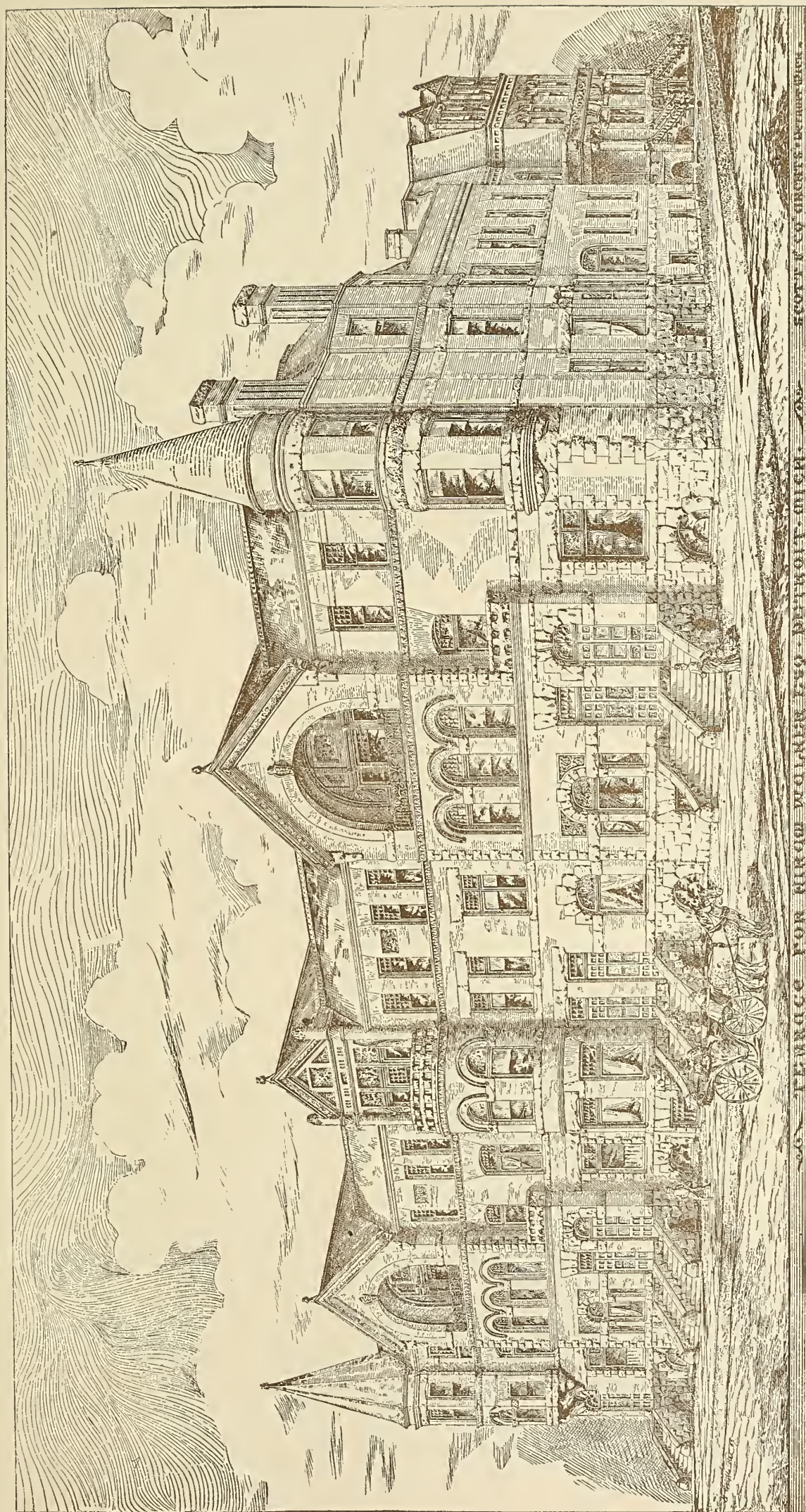
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OCTOBER, 1887.

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THE American Institute of Architects will meet in Chicago October 19, 20 and 21. The Institute will be the guests of the Chicago Chapter A. I. A. and the Illinois State Association of Architects. Arrangements have been made by which the members will be welcomed by the Chicago architects, and the Leland Hotel, the most attractively situated hotel in the city, has been selected as the general headquarters. It is located on the corner of Jackson street and Michigan Boulevard, and overlooks the Lake Park and Lake Michigan. For the convention, the directors of the newly completed Art Institute have presented the use of their building. This contains a commodious lecture room, in which the convention will be held, and the ante-rooms will be fitted for the display of the large collection of drawings and photographs contributed by the leading architects of the country, which will form one of the special features of the meeting. This collection will be kept and shipped to Cincinnati, to be exhibited at the convention of the Western Association in November. In choosing the Art Institute for the convention, the committee in charge have shown great wisdom, it being most accessible and commodious, as well as appropriate. The Entertainment Committee have issued a programme of the convention (page 37), outlining the order of proceedings and the different forms of entertainment which have been provided. A larger attendance is expected than has been present at any convention of the Institute for many years, the growth of Chicago and its architectural development making a visit full of anticipation and interest, especially to eastern architects.

PRESIDENT BLAIR of the National Association of Builders, in accordance with the resolution adopted at the last meeting, recommending the appointment of a committee on uniform contracts, has appointed E. E. Scribner, of St. Paul, George C. Prussing and P. B. Wight, of Chicago, as a committee to represent the association. The resolution as introduced at the late convention by Mr. P. B. Wight, is as follows:

- WHEREAS, It is desirable,
1. That all blank forms of contracts for building should be uniform throughout the United States;
 2. That such forms of contract, with the conditions thereof, should be such as will give the builder, as well as the owner, the protection of his rights, such as even justice demands;
 3. That whenever a proper form has been approved by this association, it is the duty of every builder and contractor to insist on its use in every case; and,
- WHEREAS, In a spirit of fairness the American Institute of Architects has framed such a form of contract as has seemed to it proper, and has asked its members to use it; and,
- WHEREAS, The Western Association of Architects has appointed a committee on uniform contracts and specifications to report at its next annual meeting; therefore,
- Resolved, 1. That a committee of ten be appointed by the president to confer with the Board of Trustees of the American Institute of Architects, with a view to the adoption by this association of the form of contract adopted by the American Institute of Architects; or if the same should not be satisfactory to the committee, such a modification of it as would appear to them to deal justly with builders and contractors in general, as well as with the owners and architects.
2. That in case such a conference is had, the special committee of the Western Association of Architects on uniform contracts and Specifications be invited to join the same before taking further action.
 3. That in case no further action is taken by the board of trustees of the American Institute of Architects, the special committee of the Western Association be asked to confer with this committee with the objects in view as expressed in this preamble and resolutions.
 4. That the committee report such forms of contract as may be approved by the conference for adoption by this association at its next annual meeting.

This was referred with other resolutions to a committee who incorporated it in their report entitled, "Declaration of Principles," in the following form:

Fourth. That all blank forms of contracts for buildings should be uniform throughout the United States; that such forms of contract with the conditions thereof, should be such as will give the builder, as well as the owner the protection of his rights, such as justice demands; that whenever a proper form has been approved by this association after consultation with the American Institute of Architects and the Western Association of Architects, we recommend its use by every builder and contractor.

The American Institute of Architects has already made a move in this direction as well as the Western Association. The latter has appointed a standing committee on uniform contracts and specifications, this being the Executive Committees of the several (14) state associations. The work of

this committee being largely in collecting statistics, from which a report could be formulated and being imperative in the direction of consultation with the committee of the National Association of Builders, the latter committee will meet the Board of Directors of the Western Association when they convene in Chicago, October 18.

THE second annual report of the Commissioner of Labor, which has recently been issued from the department of the interior, is wholly devoted to the subject of convict labor. Chapters I, II and III of the first part are given to statistical tables, analyses of statistics and summaries of reports of recent state investigations. In Chapter IV are found Commissioner Wright's deductions and conclusions with regard to the advantages and disadvantages of the several systems in vogue or proposed, and his recommendation of the scheme which seems to him best in view of all considerations. The second part is devoted to a compilation of the laws of the states and territories with regard to the employment of convicts and to a very interesting collection of notes on the treatment and employment of criminals in various countries in ancient and modern times. Special value attaches to the latter chapter, as no previous work has attempted to cover the entire ground, and many of the sources from which the facts are drawn are inaccessible to the majority of readers. The tone of the report is conservative; though, if our recollection is not at fault, there has been a change, or at least a decided modification of the opinion of Mr. Wright in the matter of the burden which convict labor lays upon free labor in competition. As a result of his inquiries the commissioner recommends that the use of machinery in employment of convicts be discontinued, and that each convict be employed at hard labor on public account, that is, that the state is to furnish materials, tools and foremen and place the product upon the market, thus minimizing the product and doing away with the contractor. There are many considerations involved in this conclusion which limited space will not permit us to enter upon; but we are of the opinion that too great stress is laid upon the unfairness of the present competition, and that, while in some cases the competition is unfair, in many more the complaints rest upon small foundation of fact.

THE method of utilizing convict labor, proposed by Commissioner Wright, would leave a deficit in prison income to be made up by general taxation, under the assumption that such a tax would rest more evenly upon society as a whole than the quasi tax involved in utilizing convict labor in more highly productive competitive industry. While we doubt whether the commissioner's position in regard to the injurious effect of this competition will be fully sustained by a complete knowledge of the facts, yet we commend the work of the bureau as an honest effort to get at the truth. In addition to the honesty of the report, the portions which we have read are free from gross and unpardonable blunders, which cannot be said for the recent Illinois report (vid. "The Principle of the Boycott," page 448.) In the review of the various systems attention is directed both to the economic and to the administrative and reformatory bearings of each method; it being wisely recognized that purely economic considerations cannot be allowed to dictate a policy which may prove to be in opposition to other and higher ultimate considerations. Men are not sentenced to prison for economic (financial) reasons, and nothing can be more futile than an attempt to set up an economic standard as the test of the best system of prison management. It is important to settle in the first place upon the grounds for the punishment of criminals, whether by confinement or otherwise, and to hold this postulate in view

in the detailed consideration of every system. The grounds for such punishment are by implication suggested in the report, but might well have been stated more clearly and forcibly for the benefit of those who of themselves will give the subject no extended thought. Such a definite starting point makes the road more sure, and avoids much rubbish in fact and argument that cumber progress and hides the real end. We purpose taking up this point more fully at some future day.

OUR New York contemporary, *Building*, usually investigates before it offers an opinion or criticises. At least it gives that impression by the uniform correctness of the opinions offered. But the following extract from a recently published editorial would indicate that it has fallen into a somewhat common error with some journals, that of making hasty comment upon news contained in a press dispatch to a daily paper. In describing the means being employed to arrest the breaking up of the Chicago Custom House, a description in the main correct, as far as method is concerned, *Building*, however, says this:

As a further protest against Chicago building or building soil, the postoffice is now being riveted together lest it undergo disintegration. A sad combination of circumstances seem to be working its overthrow. The soil of Chicago, originally a swamp, forms but a poor foundation for such heavy structures, and then the building itself, being of poor materials, tends to aggravate the trouble.

* * * * *
Chicago, notwithstanding its bad soil and the difficulty against obtaining foundations, has erected some of the largest and costliest buildings on the continent; but a stranger looking at its city hall shorn of its cornices and belt courses, and the postoffice undergoing repairs, could not fail to draw inferences unfavorable to the constructive knowledge of Chicago builders.

The cracks on the walls of the Chicago Custom House are due to unequal settlements. This is not occasioned by inferior materials or workmanship (though some other defects in the building are) or to bad construction *per se*, but to the ignorance of the architect (?) who planned the foundation. As the soil was soft he reasoned that a continuous bed of concrete would float the building, and he laid a four-foot layer over the entire surface. If this thickness had been multiplied by four it is doubtful if the result would have been very different. The result was that each part of the building settled according to its weight. But all this has nothing to do with the "constructive knowledge of Chicago builders." The city hall was a county "job," and built of stone that was selected because it was a product of the county and not for its permanent qualities, a fact that is unfavorable to the county administration, and not at all to the builders, and only in a limited degree, if any, to the architect. That Chicago architects and builders also are the very opposite to the inference drawn from *Building's* remarks, is proven by the immense structures erected in the neighborhood of the custom house, that have settled but little more than if built upon rock, and then with perfect evenness. Chicago architects know that in a compressible soil each pier should have a foundation proportionate to its weight, and that each should carry its own weight and have nothing to do with that of its neighbor.

THE death of Mr. Alexander Stuart, of Peterhead, Scotland, lately announced, closes the career of one of the oldest and best known contractors in Scotland. Mr. Stuart was in his eightieth year and until twelve years ago was in active business. During the fifty years of his active life the most noted of his works was the erection in 1853 of the royal castle at Balmoral under the plans of Architect Smith and the superintendence of the queen's highland residence. Among other works are Ackergill castle, Balfour castle, Torrasay castle and Belladrum are of the finest country residences in the highlands. In the long list of public works erected by Mr. Stuart the greatest variety exists. The Naither Buckie harbor and the Corran Ferry lighthouse, under Architects D. & T. Stevenson of Edinburgh, and also the Holborn Head

lighthouse at Thurso. Several forts and batteries were also constructed under his direction, and numberless other works of the same character. The Ladysbridge Asylum and the county buildings under plans by Architects A. & W. Reid, of Elgin, were erected by him. While recovering his strength after a severe illness at Lohead, he conceived the idea of erecting a homeopathic sanitarium establishment at Crieff, which, with the coöperation of a prominent physician there, was carried out and is still a popular and notable institution. His life was a busy one and his name will go down to posterity among the great contractors of Scotland, who "built well." His brother James is in active practice as architect and contractor at St. Louis, and his nephew William is known to two continents as the patentee of the granolithic pavement.

IN the first annual report of Architect J. L. Smithmeyer, in charge of the new congressional library building, to the secretary of the interior, the testing of the ground for the foundations is of peculiar interest. For this purpose a testing machine was constructed to give an accurate test of the entire soil. The method employed consisted in constructing a car bearing the required weight in pig lead. This was placed in the foundation trenches upon iron rails, which rest upon four cast-iron pedestals, the latter being set four feet apart each way, each pedestal covering one foot of ground. Thus one-fourth of the entire weight borne by the car rests upon each one of the pedestals, and the precise weight sustained by each square foot of ground is exactly determined. As several wells, the remains of an old brewery, etc., were found while making the excavations, these minute tests were extremely necessary, though the remainder of the soil seems to be composed of yellow clay and sand. The elaborate set of plans and preparatory work required and reported upon would indicate that the architect not only understands the problem but is paid for solving it.

THE Architectural League of New York has instituted a system of annual competitions, which are open to the draftsmen of the United States under twenty-five years of age. The programme for the first competition, which we print in another column, is very modest in its conditions and unambitious in its requirements, giving a subject incorporating equally the artistic and designing abilities of the draftsman. If the practical side of the subject seems a little remote, it may be all the better as tending to draw the designer's talent out of the beaten track of houses, flats, office buildings, etc. The league is deserving of the greatest amount of encouragement as well as a corresponding success. As a good example should be copied where practicable, why should not the Chicago Architectural Sketch Club organize a similar competition, and then perhaps the scheme might be carried further and the successful drawings in the two competitions be adjudicated upon by a competent committee for first place among American draftsmen.

VANDERBILT UNIVERSITY, at Nashville, Tennessee, has organized a department devoted to manual technology and highway engineering. These departments are thrown open free of charge, or, in connection with other departments, without charge. As one of the oldest and most progressive universities in the South, these departments will greatly add to its value and influence. That department devoted to highway engineering is especially noticeable, as the demand for more permanent highways, and streams properly and safely bridged is becoming a greater necessity each year, with little engineering talent to supply the constructive demand except that imported from the older European countries.

Architectural Partnerships.

BY L. H. G.

EVERY successful architect has said: "The first principle in architecture is to get the business." A young man who had the benefit of an office education and the help which comes from the training of an architectural school, still felt himself lame in the matter of professional tact or business sagacity. He had it in mind that there were those of greater experience than he, who might help him if they would, and during the months which preceded his entrance to professional work on his own account he had a great many talks with one who took much interest in his future, and who was capable of giving good business advice to anyone. He said: "I believe that I could write a book which would be of great benefit to young architects, and may be to some of the older ones. My experience, as you know, has been large, and from my own standpoint I would say that I have been successful. I have done a large amount of business, and I believe that those who have intrusted their business to my care have been fairly well satisfied. A certain amount of professional tact and business sagacity are as necessary to the architect as to one who would handle the business of a store, or that of publishing or editing a newspaper, or doing any other kind of regular business. There are architects who are acquainted with the details of the profession, but yet who have no adequate ideas of business, and who are sure to pass through life in an unsatisfactory way. They will probably end their days in poverty. On the other hand, there are those who have the business capacity, and yet are largely devoid of professional capacity, and still are successful in business. It is pitiful to see a worthy architect, deficient in business qualities, waiting year after year for a comfortable business. It is galling and harassing to see one who is deficient in the professional qualities of an architect, but who is yet able, by the exercise of tact and business ability, to achieve success in a business way without the help of the professional considerations."

"Could you lay down any rules," said the young man, "for one just beginning in his work as an architect?"

"No, I do not believe that I could give you any rules. I do not believe much in rules under any circumstances. I could lay down a few general principles in an unsystematic way, which might help a young man, though to have it presented to me in this way, without previous thought or time for arrangement, my expressions must necessarily be somewhat unsystematic."

"What would you say to a young architect's taking a partner?"

"Well, I would say 'don't.' As you probably want reasons I will give them to you. In the first place, if I were to ask you why you wanted to take a partner you would probably not know your own reasons. You would probably give a reason, but it would not be the right one. As a general thing, the real reason for a young man's desire for a partner is to have some one to lean upon. Two young men will go together and lean upon each other. They lack confidence. They are timid, they want company. They want the support of each other. If the young man goes in partnership with an older one he operates to a disadvantage. He is in little better circumstances than if he were working in an office. The chances are that he will have to bear a large portion of the burden of responsibility, do most of the real work, and only get a small portion of the fees. An architect who has an established practice does not take a younger man in with him in a spirit of charity or consideration for the young gentleman. If he does it at all, it is for the purpose of relieving himself, or that he may get the benefits of the young man's energy and talent. If a young architect has the opportunity of entering into partnership with an older one with experience and a good business he need not be flattered by it. He must understand that it is a business operation all the way through, and that he will have to work for all he gets. The only way for a young man to conduct himself in a matter of this kind is to enter into partnership on even terms if he does it at all. I merely mention this as a contingency. Why, take my own case, and were I to say to you that I would like to have you enter into partnership with me, I would do it merely for the purpose of relieving myself of business cares and responsibilities, or of getting the benefits of your talents and fresh ideas as a young man, or for all of these reasons. And you would probably have to bear the brunt of the fight, and even then I would probably get the credit, if not the profit, for most of the work that was done. If the character of my work were improved my clients would not, in all probability, accept the facts in the case and recognize you in the matter. If for any reason our partnership were dissolved and you went into business by yourself, you would in all probability labor under about the same disadvantages as one who was making an entirely new start. I would be the one who was benefited by the association, providing there was a benefit. You would be playing second fiddle. You would be the fiddler behind the scene, I would get the applause. So if you must go in partnership with an older

architect, go in on equal terms if he really wants you, wishes to lighten his burdens, or wishes your help, you can go in on these terms as easily as any other.

"As to a partnership with one of your own experience and position there is absolutely no advantage in it. A young man entering into professional life is necessarily somewhat embarrassed, and when there is a pair of you it is all the worse. Your timidity is apparent. Then partners are not usually equally matched, in industry, tact and similar qualities, and are not equally liked by the public. Hence union does not prove as satisfactory or beneficial as expected."

"I believe that I prefer to enter upon my career alone," said the young man.

"That's right. After you have decided that you wish to do for yourself distinctly, that you wish to open an office as it is called, you should fix the exact time, neither too late nor too early with reference to the building year. The first of February is a good time. Then you do not have to burn coal all winter waiting for business. You open your office at a season when people are beginning to look around for an architect. It is discouraging to commence in the middle of a year, when most of the drawings have been made, when most of the people have got their work started, and you are liable to drag along toward the end of the building season without a great deal of benefit. In such a case you would have to struggle through the winter at a loss."

"I have not decided as yet in what city I will open my office."

"Ah, you have not? I did not know but that you would open your office here."

"No, I think I will go to the West. There are too many architects here, and I believe it would be better for me to go into a new city."

"Well, maybe that is right. You would probably get a start easier in some of the western cities than here. Your competition would not be so great in the matter of numbers or in the general ability of the profession. I would not attempt to lay down any principles as to the selection of a city geographically. Only this: I would say, select a large city, one with a hundred thousand inhabitants or more. The general business principles which would apply to one city would apply to all. Success is a mere matter of degree."

"Do you think the location of an office is a very important matter?"

"For a young man, indeed I do. Do not select any room because it is cheap, or because it is large or has a good light, or any such reason. Select a room that people can get to easily. Let it be in the heart of the city, where there is the largest amount of travel; a district surrounded by solid business. If you locate in an out of the way place, it would suggest that your ambition was defective, or that you had a slight distrust of your own acquirements. Get a room in the best block in town, even if it is a small one. All of the large rooms in such a block of this kind will usually be taken. People may understand that you took the small room because you could not get a larger one in that building. It is risky for a beginner to locate too near the office of a successful architect. The client who starts out in search of a plan for a house in the same way with that he would proceed in buying a new buggy or a horse, or something of that kind, would be most certain to go into the office of the older architect as well as your own. If he would get into the office of the older one first you would probably never see him. That gentleman's skill in handling a prospective client would in probability exceed yours. But if he were to go into your office knowing that there was another architect in the building, he would probably leave you, promising to call again. Possibly he would call, maybe he would not. If your's were the only office it might be that he would do business with you merely because he did not care to go any farther."

"If possible have a good, light, airy office. Let it look fresh, neat and clean, showing that its occupant is possessed of taste as well as learned and professional qualities. Let it have the appearance of being distinctly an architect's office. It is a good thing to place some of your drawings on the wall where people can see them. Frame some photographs of good buildings; hang them up for your own benefit as well as those who come into your office. Take care to avoid a quackish display. People are very quick to detect anything of this kind and to be affected by them. It is not unprofessional, however, to expose some of your books."

"It is well to have a part of your office separated by a railing or inclosure from the rest of the room. In that part you can do your work. If you want those who come in to be near you, you can ask them. At the same time you have the advantage of keeping them away if there is any reason for it. However, you must avoid giving offense to anyone. Maybe that you are working on a drawing or something that you do not want a caller to see. It may be possible that he would feel himself privileged to come inside of your inclosure and look at what you are doing. You have a catch or spring to latch your gate. As he undertakes to come in you can walk toward him, shake hands with him and ask him to sit down. Give him a chair on the outside. It is possible that he may take the hint. You

have treated him kindly, and he cannot directly accuse you, even in his own mind, of restraining him.

"In this connection you should remember that people who employ you do it because they want help in the business of building. They wish to be free from the care of that kind of work. They do not employ you as an artist alone, they wish your help in a business way. Remember this and conduct yourself accordingly. Be exact and punctual in all your habits. As you wish to succeed do not let your office be a lounging place for young men, or contractors, or politicians, or anyone excepting those who have business with you. The knowledge that you have regular business habits, that you attend to your business carefully, that there is no nonsense about you, will do more to establish you firmly than anything else. The fact that you do not have work to do which is not directly remunerative should not prevent you from being busy in your office at all times, and being there during all the business hours. It is a good thing to have the reputation of being busy, of being industrious. It is a good thing for your acquaintances to understand that when you are in your office you mean business, that they cannot stand around there and chatter and smoke, and act playful. There is no one but who will respect you more, and do more for you, for restraining anything of this kind, than they would if you gave them free license to do as they please."

"You should devote a part of your time to making acquaintances. Your name has to be known and be known favorably before you get a great deal of business. Your personal qualities may contribute largely to your success. However, you should not hand shake or harmonize unreservedly. Be very careful and not be too familiar. Familiarity or an overdesire to make acquaintances will do more harm than good. Never become so familiar as to lay all formality aside. The light, trivial, 'good fellow friendships' do not pay. I may again emphasize the fact that you must seek the respect of all those whom you meet and know. Your manner, even to the casual acquaintance, will do a great deal to effect this result."

"I might mention in a detailed way a great many more things in connection with your office and your personal deportment, but these things will come out from time to time as we consider other general matters. I have said all that I can at this time, but if you please we will have a talk about your first clients and others that come to you during the early months of your practice at some later day."

Mutual Destruction.

BY J. FREDERICK ELSOM.

IT is a fact, but nevertheless one that has escaped the attention of many that many substances and materials used in building are mutually destructive. Certain kinds of wood which, taken individually and separately, possess remarkable lasting and wearing properties, placed in positions of mutual contact rapidly deteriorate and maybe soon disintegrate and decay. In a farm fence two woods, cypress and walnut, each a timber justly celebrated for long wear and immunity from the destructive atmospheric influences, when placed together rotted very rapidly. The same was true with reference to cedar posts and cypress leaders and palings; at the point of contact decay set in at an early day and progressed very rapidly; and to prove that actual contact was the ultimate cause, the two were separated in a number of instances, in every one of which rotting ceased, and the wood remains perfectly sound save where they were in contact formerly.

With the growing scarcity of many valuable building woods, it becomes necessary to back and fill with varieties not formerly used. As a result there are many structures already tottering with decay that should have remained perfect and erect for many years yet, and that, too, when the timber is in out-of-the-way and isolated positions favorable to long life and usefulness.

Though the world of science is yet too young and weak to reconcile the two branches, architecture and chemistry, the time will come when the scarcity of building material in general, wood in particular, will necessitate chemical as well as architectural analyses before it will be deemed safe and expedient to place two untested woods or other substances together. All have seen the effects on timber exposed to gases emanating under certain processes of manufacture, and many have marveled at the permanency of some and fragility of others, when, as is often the case, conditions and surroundings being changed, the property of wood often changes correspondingly.

It is safe to state that no two varieties of wood possess the same essential chemical characteristics, and the instant one possessing much alkali is placed near another that may acid in its reaction, will invite rapid dissolution and decay. What is true with reference to wood applies with all the force to other materials used in structures. Two uprights, the main stay of a quite large country bridge, rotted off at the ends when bolted together with an iron bolt; new ones were placed in and fastened by wooden pins of the same variety, and ten years have elapsed and still they stand. In

the first instance beech, which is known to contain much acetate, was used, and the iron soon oxidized, transmitting the rot to the wood, and though the rest was perfectly sound about the splice soon rotted off, while in the latter case the same wood, I believe from the same tree, was used, but the wooden pins did not rust, and the joint remains firm and sound at this writing, and it is now nearly ten years since the renewal was made. Now, if a wood like ash or oak, having less acetate in its composition, had been used, instead of rotting and oxidizing it would have tended to preserve the iron, hence would last longer than if fastened with pins made of its own species of wood, or any other for that matter.

American Architecture of the Nineteenth Century.*

BY JOHN S. ROWE.

IN treating the subject it is not the intention of this paper to speak in detail of all work done either by builders or architects of this century, as this would be tedious and probably uninteresting, but after casually surveying the work, from the commencement of this century down to the new departure, as it is known to most of us, we will try and see what influence has been brought to bear to have produced this new departure or free composition and classic detail.

At the opening of this century the architects of England and America were divided into two camps, and professed to be followers either of Gothic or Renaissance architecture. The medievalist acknowledged certain principles of design, while the classicist accepted certain forms and formulas as efficacious and final. But by no means can the architecture which gives to America at this time, its architectural character, be considered the work of book-learned architects. It has been said by an author, who has contributed liberally to *Harper's Monthly*, "that the typical American house of this period, which is that period immediately after the Greek temple had spent its force, was the most vulgar habitation ever erected by man." This is due to the fact that the builders had lost the training in the forms and formulas which were considered as stock in trade by their predecessors and bequeathed to them from generation to generation.

This period, in which the builders tried to do "something American," extended from the commencement of the nineteenth century down to the building of Trinity Church by Upjohn in 1845, which dates the commencement of the Gothic revival in this country.

But it is evident that the New York City Hall and the Albany Academy, which were built in the period above mentioned, were by architects of culture, according to the standard of the time in which they were built.

In the works of Messrs. Upjohn, Cady, Eidlitz, Potter, Wither and Wright we see some good examples of Gothic, which follow the building of Trinity and bring us down to the new departure.

But before treating of the new departure let me mention that in Mr. Post's and Mr. Hunt's work we may find some good examples of American Renaissance. In the new departure we see three distinct influences; the English or Queen Anne, the American or Colonial, the French or Romanesque, with Byzantine detail.

What is Queen Anne? When did it originate? Where and under what influences? Who were its masters?

To the student who looks well into the subject, the Queen Anne and Georgian periods will almost appear like a mirage, in which he will see streets lined with tall red buildings, with tile roofs and long and narrow sash lines painted white, with outside green blinds, but if he seeks an academic answer, he will be told that the earlier work of Queen Anne was a feeble attempt to apply the Palladian rules designed for mansion houses built in marble to small brick buildings, and that later Queen Anne is but a craze. He will also be told by his academic professor that the English gradually developed the feudal castle into elegant and picturesque mansion houses of the Tudor kings, and that the Elizabethan architects carried this fanciful system of construction to its highest perfection, and that the building art which followed became debased, a few bright lights in Inigo Jones' and Wren's work remaining, and that the influence that William and Mary and Queen Anne exerted upon the world was stiff, starched and formal, and this same influence was visible in the buildings of that period. The Free Classic of the Georgian period followed, which was more refined, delicate and aristocratic, but lacking firmness and boldness in composition.

With the advent of Victorian Gothic, Free Classic passed into oblivion, to be resurrected again in the nineteenth century.

But Queen Anne, like all other styles, has its history.

For convenience we will divide Free Classic into three periods: Stuart or Jacobean; William and Mary and Anne, and Georgian period.

Two hundred years before the Medieval ecclesiastical style had died, giving place to Free Classic, which at first was rude, but though it did not attain the perfection it reached upon the continent, it gradually attained an academic system which produced some mansion houses of elegance and dignity.

The reign between Elizabeth and James I marked a domestic style of a mansion house after the type of Tudor Gothic, with an admixture of Renaissance of the time in which they were built. The Gothic feeling gradually fell out, and left the Renaissance of the Jacobean period. The streets of London, before the fire of 1666, had numerous examples of the Jacobean period.

The street fronts that often overhung in the streets were of wood and plaster construction, the timbers being either painted or carved, and rough-cast plastered between. Designers of today find in this period the oriel window of our late Queen Anne.

In Wren, who built nearly all the burnt district, including St. Paul's Cathedral, we find an architect who was a good constructor and no less artistic in his feeling, and boldly adapted the system of the Renaissance

to the requirement of the times, modifying his detail to meet the exigencies which arose. We find in his work, which extended to the eighteenth century, the lavish use of water-struck brick, with belts of molded and carved brick; also carved panels of the same material. The crow step gable was also in use at this time.

The second period was of one-fourth century's duration, one half in seventeenth century and the other half in eighteenth century.

The ascension to the throne of William and Mary once more brought England into closer relationship with the continent, thus engrafting into her home architecture foreign features. We see Flemish and Dutch influence in the high-stepped gables, with their wavy lines and broken pediments, terminating with volutes placed over doors and windows, become frequent during this period. The use of molded and carved brick was yet in use, and gave what beauty and elegance these buildings possess, but we see a gradual decline in the Free Renaissance, which gave to Wren's work so much life and vigor until, in the Georgian period, we see it no more. The publishing of Stewart's and Revett's antiquities was the cause for the attempt by many architects of the Georgian period to adopt the Doric porticoes and other Greek features to the domestic architecture. There was also a feeble revival of the Gothic in this period.

In the early part of the Victorian reign, the architects were discussing between the two rival schools, Classicism and Gothicism. The latter finally prevailed, and once more architecture was a living art, especially in ecclesiastical architecture, the mansion being the type of domestic architecture; but it did not so well express its function. It was in this transitory state when Parliament passed the "Elementary Education Act." This was an opportunity for the English architects to develop their latent energies. It was the desire that the school buildings should be simple in plan and construction, with but little architectural display, using the native red brick. Molded brick could now be obtained in abundance, the tax having been removed. Such was the beginning of modern Queen Anne.

Queen Anne architecture began in America immediately after the Centennial. It was there that the American architect saw in the exhibited terra-cotta a field for great expression in brick architecture; and as the result, America is not now behind in good examples of the Free Classic of Queen Anne.

It has been said by a recent writer on New York City architecture, that a city front to be Queen Anne may not necessarily have more than one feature, which is from the periods above mentioned:

For instance, a dormer or an oriel window is sufficient to give to a street front that quaint, picturesque and unobtrusive effect which is so characteristic of the style. The egg and dart molding is used very frequently, but a more judicious use of it is required than is seen in a street front in New York, where the author of the design thought so much of this molding that he placed three bands of it across his front, thus destroying its function.

The second influence exerted upon the "new departure" is that of our colonial work.

In considering colonial work we must keep in mind the differences in the starting point. For convenience the colonial work of the English colonies of North America may be divided into three periods, commencing with the first settlement and ending at the opening of the revolution.

The first period may be said to embrace nearly all of the seventeenth century. Here the effect aimed at is solidity and protection from the elements. The end walls and chimney were of random stone, laid up in mortar, composed of sand, shell lime and gravel; the sides and ends above plate were of oak framework, usually boarded crosswise. These boards were sometimes covered with stucco work, but usually with split shingles. In the second period or first quarter of the eighteenth century, we find all frame construction, the rough boarding being covered over with thick clapboards beaded on the lower edge. The roofs were covered with shingles, but of a better quality than before used.

Here brick takes the place of stone for chimney construction and the gambrel roof, which is an invention of the colonials, was used and highly developed in its stay of a century. It was an economizer of floor space, and with its highly developed dormers, became quite artistic. The window frames of this period were plank, with molded edges, also cap and sill were molded. The small square panes of glass, set in wide muntins, gave to the whole a pleasing effect. The gambrel roof, after a little, became modified into the hipped roof with a railing above the cornice, but in the earlier examples of this roof, instead of being hipped in all around, it was simply hipped around the lower part and terminating in a little gable end.

The commercial prosperity of the colonies, which is the commencement of the third period in which colonial work is divided, demanded a better class of buildings than before erected. We now see the hipped roof finely developed. The planning is simple, but the detail is delicate and refined, adding much richness to the interiors. Dutch tile is used to good advantage around fireplaces, being held in place by brass bands, giving a quaint and homelike appearance to the interior; this is also the period when brass hinges and latches were used. Much emphasis is given to the front door by means of a highly carved entablature, placed over door upon pilaster with Corinthian capitals; the muntins in transom were often curved or fenestrated.

The public buildings of this period were good examples of the Georgian period of Queen Anne. The position that the domestic architecture of America holds, is undoubtedly due to the influence that the colonial work has had upon the members of the profession.

We have now come to the third influence (the French) in our division of the "new departure."

In France many an aspirant of art culture has found material partially developed for a fascinating study. These examples may be found in the Romanesque and Byzantine works.

These aspirants not only imagined that they would have an influence upon the architecture of the "new departure," such influence as we see in Richardson's and Hunt's work, but that after mastering the symbols and signs of expression they would voice themselves in the principle that all

* Paper read before the Buffalo Architectural Sketch Club, March, 1887.

creative genius has to do is to stretch forth its hand to accomplish anything that their heaven-born instinct may impel them to.

Prof. Ware and his students are of the French school, which is to give massiveness and boldness to its structure. In Richardson's work we find a loose Romanesque worked up in the best Byzantine detail. Richardson was a large absorber and a skillful arranger; Trinity tower in his Boston church can be seen, by looking at a photograph of work in northern Spain, to have been taken from the cathedral of Salamanca.

Hunt also studied in France, but his designs (though being French in detail) are Anglo-Saxon in spirit.

What foreigners say of our American work is, there is boldness, thoroughness, directness of aim and a lack of conventionality which is extremely refreshing, though the lack of conventionality is open on the art side to criticism, but as to the structural points there can be no doubt as to the success obtained. Our fireproof system fares far ahead of England.

Richardson, in the Haward law school, has shown a vast amount of originality mixed with extreme breadth and boldness of treatment.

He possessed the ability to change Neo Grec so as to constitute a series of original conceptions.

Thus we have seen what were the influences that have brought about our "new departure in American architecture," which brings this paper on the nineteenth century architecture to a close.

Originality in American Architecture.*

BY GEORGE W. MAHER.

FROM want of travel and personal observation most of the information obtained by the speaker is from reading or hearsay, and as the subject embraces a large scope of architectural features, he is compelled to take but a general survey of the subject.

America is noted for its character of progress since first it was settled in modern times. To the present day the people's tendency has been toward that which is an improvement upon old European methods and forms.

The basis of thought and action has been practicability.

That which had hitherto been done before with much friction could be simplified, thus modern conveniences are of a higher standard here than elsewhere in the world.

The originality in American architecture rests to a great degree upon the basis of studying the necessities of labor and life, and meeting them without hesitancy or prejudice. To attempt to designate any particular style in the vast amount of designs seen from any one point of view in our large cities would be too great an undertaking for our limited time and space. That there is a character which distinguishes itself is evident from the fact that architecture in Boston is different from that in New York, and Chicago buildings have a different character from those in Cincinnati, and so on.

This peculiarity or originality in design arises from obvious local reasons; the exactions of an educated and active public are essential for any improvement in art. Thus was it in Athens in the time of Pericles, and also in Florence in the fifteenth century.

The architects were held in true paths by a dictating and appreciative public. In our large cities this long-wished-for tendency is beginning to be felt. As the newness wears off and an equilibrium of thought and action begin to predominate, finer tastes arise and a thirst for better things is a sure follower of education and wealth. This crystallization can be distinguished through the efforts put forth by the people to purify all things, to encourage that which is ennobling; when in an architectural sense the aim is for truth of expression and substantial ability in execution; where there is a less inclination to jump from one extreme to another for the mere sake of novelty.

We should not wonder that in the past there has been such a confusion in building; for in the first place the main aim of the people has been to better their condition financially, not seeking to a great extent after beauty nor encouraging art. This was not their aim nor education; they were the promoters of progress and were necessary to lay the rough foundation upon which the finer instincts could be built afterward.

In the second place, they did not have the means to employ real talent to erect their edifices, nor did genius wish to emigrate into such localities. To demonstrate these facts we need only to look back a few years at the condition (architecturally) then, and note the difference when compared with today, progress there is in every direction. The Western Association of Architects, Association of Draftsmen, architectural journals, attention paid to the fairness in competition, and so on, are mainly the fruits of an educated and appreciative public who have now the time to encourage the arts; and, if we turn our attention to buildings, is it not gratifying to note the improvement in the style of building erected today, compared with that erected a few years ago? Note the changes in residences, school buildings, churches, depots, office buildings, and if the comparison is truthfully made, originality can be claimed, for though there may be exceptions yet on the whole the improvement is clearly evident.

To examine this statement of originality intelligently, let us compare our ways of progress to those in Europe and see if we cannot trace the difference when pertaining to building. The ideas of Europeans are different from the Americans. They have their set ways and manners handed down from ancestry, which are hard to change radically; their architects are compelled to pass a rigid governmental examination before being allowed to practice; therefore, their buildings are studied to perfection in detail, but only after a prevailing style; the formulas are given; classical lines dictate; methods of construction are repeated; and, though the building may be above free criticism, yet there is that sameness to all of them which rarely dares to be original.

Viollet-Leduc, in his discourses on architecture, deplors this fact, believing that an architect should be thoroughly acquainted with all the styles, yet points out that in designing he should not be influenced by any par-

ticular one of them, but should reason out his own designs to suit these various purposes.

In American architecture no such rules govern the architect; though familiar as he ought to be with historical architecture, epochs of the past do not imperatively prevent him from giving free course to his American ideas. He designs to the limit of his capacity, and though the result may be far from satisfactory at times, yet on the whole it is beneficial, for he submits his ideas to common reasoning, and of all virtues necessary to complete a substantial building in the nineteenth century common sense is not the least one. So, in comparing the different countries and their methods of progress and advancement, it can be truthfully claimed that there is as much chance of a national style forthcoming in this country as elsewhere in the world, and that its progress will be fast or slow according to the encouragement given by the people. For heathenish tributes, the temples of Greek origin are gone, and imposing churches of Catholic sway and Papal supremacy, the fruits of centuries, are part of the past. These promoters and encouragers of gorgeous art are gone, and in their stead the will of an enlightened public will be the dictator.

Let us turn our attention to the American residence and note the improvement made on this class of building during the past few years. What was it originally? Generally a structure boxy and meaningless in every detail; if a large building, perhaps a poor copy from some photograph of an edifice in Europe, a confused style where galvanized iron was used to excess and clumsily executed. What have we today? In most of our large cities a class of buildings can be seen which have no equal for interior arrangement, original to this class of buildings in every particular, for nowhere are the wants of comfort and practicability so sought after as here, and nowhere the world over are modern improvements so easily adapted as here; this, in fact, when carried to excess may be a fault instead of a virtue. The exterior of these buildings presents uniqueness. The façades are generally of rock-faced stone; the peculiarities are low and wide windows, short tapered columns, low overhanging roof balconies, large sweep of roof gabled, massive chimneys, carving finely wrought. The style leaves an idea of substantiality; no lie can be discerned in the material used or the manner of using it.

The late H. H. Richardson was the most prominent in placing this class of building on a substantial basis, and it is now receiving encouragement. The idea of massiveness, imposing centralization, of grouping novel ideas for comfort in the interior arrangement seem to be the motives most sought after. This style of building differs from European buildings of the same class in both plan and façade. The arrangement of rooms in European houses is on different principles, to accommodate the needs of a people who have different wants; original ways of planning to suit different national characteristics is only a natural law which the architect is bound to respect. To be sure, there are houses now being built on the European plan of arrangement, but whether they will prove satisfactory on the whole to republican ideas remains to be demonstrated; certainly the American residence is a model for comfort, and this impression seems to be universal.

As regards façade, the comparison is great, when drawn between American and European buildings of this class. That the Americans pay more attention to the outside is clearly evident, and if the design is poor it is owing to the inability of the architect. The façade of an European resident portrays a given style, Classic, Gothic, or transitional; they are built substantially and outlive our buildings generally.

The American resident differs in that no particular style is followed, but that free vent is given to the designer's fancy. As a whole for originality of façade, the American residence is superior. It portrays more tact, more variety in grouping, and though architectural blunders are seen, the idea conveyed is a newness of design which can be called originality.

Another class of resident buildings which is genuine to the American soil is the frame suburban house, sometimes called Old Colonial, though no particular name has yet received universal acknowledgment. This class of buildings was first encouraged on our eastern coast, New England. Coupled as it is with certain features belonging to the Queen Anne, there seems to be enough originality in it to convince most people of the progressiveness of this country.

It is not every architect who can grasp the idea, in fact there is much opposition to the shingle house as it is termed. If designed aright it presents a model for picturesqueness. Rock-faced base, porches plain and devoid of spindle work, gables pierced with windows having small lights, carving worked on solid wood, long sweep of roof pierced with short, massive chimneys, it tends to leave the impression of quietness of home rather than a dazed impression of grandeur. This is the right idea of a residence, to have it speak of its function. No building has genuine style which does not speak of the thought which first brought it into existence. Thus the true path toward an original style is to follow the dictation of necessity and then to improve upon detail. The interior of this class of building presents comfort in every form. Large, old-fashioned fireplaces, ease of stairs, nooks with settees; heavy oak beams leave the impression of solidity; low ceilings convey the idea of privacy; all contribute to make life a matter of ease. This style of building suits the taste of the better class of American people, and if encouraged aright will develop into a style that speaks of home and comfort.

The American school buildings contribute to our list which can be pointed to as being original in arrangement and façade. Of late years it has developed wonderfully, owing to the attention paid to such matters by the public. No models equal to them for convenience, light and ventilation can be found elsewhere. It has been owing to the dictation of the people mainly which has brought our school building to its present level of perfection. Hence the necessity of having an appreciative public to encourage any form of art. The true artist will be forthcoming.

Office buildings, a class necessary for the business enterprise of the American people, are original in almost every detail as regards arrangement, and, to a great extent, in elevation.

A celebrated writer, in speaking of the Romans, says, "He never felt in the dark, it was a sign of advanced state of civilization that he submit-

* Paper read before the Chicago Architectural Sketch Club, September 12, 1887.

ted everything to common sense; that he made himself obeyed, because he made himself understood." This we can say truthfully of the Americans when pertaining to larger buildings, particularly the office building, that he submits everything to common reasoning that he does not feel in the dark.

Thus we could point out various classes of buildings which have originality in some form or other; such originality is bound to exist so long as there are different nations and speaking a different language; their wants are, as a matter of course, of a different character, hence their living abodes must correspond to their tastes.

Separated as this nation is by great distance from the older nations, progressive in her character under a free government, one of the main essentials for development in art or practical science, there is no reason why a style should not develop, which if not particularly grand in one sense, would be grand in the sense that it exhibits the wants and necessities of an enlightened life.

We have heard over and again the complaints made upon our buildings, and there certainly are prominent things as regards design to deplore. Yet time alone will be the true corrector. Rome was not built in a day—and American architects can best contribute to the art in their country by elevating the character of these designs themselves rather than calling too much attention to the fact outside the profession and dictating what rules should be followed. A true architect, like a true poet, is born, not manufactured, and the prospect for the future is that more talent will be developed in our edifices erected in the future than those erected in the past.

Illinois State Association of Architects.

THE annual meeting of this association was held on Saturday, October 1, President Adler in the chair.

After the usual lunch the minutes of the previous meeting were read by Secretary Stiles.

J. W. Root, chairman of the Executive Committee, reported that his committee was acting in concert with the committee of the Chicago Chapter A. I. A. in preparing for the coming convention of the American Institute. The rooms of the Chicago Literary Club in the new building of the Art Institute had been secured for convention purposes, and the Leland Hotel had been selected as headquarters. The committee had decided not to give a general banquet, but a pleasant programme would be arranged so that lunches would be given and individuals would entertain visitors at dinner. Ample provision had been made in the way of carriages, etc. Notices had been sent to architects, not only to those who were members of the W. A. A., but leading architects throughout the country, asking them to send drawings to be exhibited at the Western Association Convention at Cincinnati, and Mr. Bloor, secretary A. I. A., had asked those of the Institute who were included in the list to send their drawings to the Institute convention first. The intention of the committee is to make a full exhibit of the reputable work executed in the last ten years, and making by drawings, water colors and photographs the most complete exhibit of completed work the country has seen. Judging from the responses received, this hope will be fully realized.

In relation to the two conventions, that of the A. I. A. and the W. A. A., it was the opinion of the Executive Committee that the matter of a union of interests would be discussed, as the A. I. A. recognized that they had been at fault in too great conservatism and the W. A. A. in too great radicalism, and that many members of each are anxious to establish some plan of common action or union.

The president asked the chairman if the outgoing Executive Committee had any recommendations to offer, and in reply Mr. Root said that there seems to have been a general agreement that the past Executive Committee had not been in a position to be as active in inquiring into the status of applicants for membership, and recommend that this be looked into more closely in the future and a higher standing be taken. The committee also recommended that the series of symposia be again taken up.

The report of Treasurer S. M. Randolph showed total receipts, \$2,196.27; total expenditures, \$1,481.10; the amount on hand at the annual meeting of 1886, \$199.52, and the amount at present in the treasury, \$715.17. There was an indebtedness in the way of dues, etc., to be collected, of \$206.95. The report was referred to the incoming Executive Committee to be audited.

It was recommended by the chair that the treasurer be notified by the secretary of all meetings of the Executive Committee. The election of officers was then taken up.

The chair stated that three tickets had been printed, but only suggestive, and members could only use them as their convenience dictated.

Mr. Treat placed in nomination a ticket composed of the officers of the past year. Mr. Adler objected in well chosen words, stating that it was for the best interests of the association that every member be considered eligible to office, and that as thorough a change should be made as possible. Mr. Burnham expressed similar views upon the subject, and the ticket was withdrawn. The following officers were then nominated and elected:

For president, Samuel A. Treat received 10 votes; Wm. Holabird, 3; Louis H. Sullivan, 6. Mr. Treat was elected president.

For vice-president, L. D. Cleaveland received 11 votes; Wm. Holabird, 6. Mr. Cleaveland was declared elected first vice-president.

For second vice-president, C. L. Stiles received 14 votes; J. L. Silsbee, 2; and W. W. Boyington, 1. Mr. Stiles was declared elected second vice-president.

For treasurer, H. W. Hill received 10 votes; J. L. Silsbee, 4; J. L. Halbur, 2; Wm. Holabird, 1. Mr. Hill was declared elected treasurer.

For secretary, Mr. R. C. Berlin received 13 votes; N. S. Patton, 4. Mr. Berlin was declared elected secretary.

For Executive Committee, L. H. Sullivan, W. W. Clay, J. W. Root and Alfred Smith were elected. The president is a member *ex-officio*. The meeting then adjourned.

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.—Twenty-first annual meeting at Chicago, October 19, 20 and 21, 1887, A. J. Bloor, 18 Broadway, New York, secretary.

WESTERN ASSOCIATION OF ARCHITECTS.—Convention will be held November 16, 1887, at Cincinnati. J. F. Alexander, La Fayette, Ind., secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Convention will be held the first Tuesday in February, 1888, at Cincinnati. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the first Saturday of every month, at 15 East Washington street, Chicago. Annual meeting first Thursday in October, 1888. R. C. Berlin, Chicago, secretary.

INDIANA STATE ASSOCIATION OF ARCHITECTS meets on the fourth Wednesdays of January, April, July and October of each year. Annual meeting fourth Wednesday in October. E. H. Ketcham, Indianapolis, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at Kansas City on the second Tuesday in January, 1888. Charles E. Illsley, St. Louis, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of February, 1888, at Spirit Lake. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 3, 1888. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Wichita on the third Tuesday of January, 1888. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting third Thursday in August, 1888, at Cleveland. F. A. Coburn, Cleveland, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets bi-monthly. Annual meeting third Thursday in February, 1888, at Memphis. T. L. Dismukes, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Houston on the third Tuesday of January, 1888. S. A. J. Preston, Austin, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1887. F. B. Hamilton, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October each year. F. M. Ellis, Omaha, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday, Builders' and Traders' Exchange. W. G. Williamson, secretary.

AMERICAN INSTITUTE OF ARCHITECTS.

The following circular has been issued from the secretary's office of the American Institute of Architects:

AMERICAN INSTITUTE OF ARCHITECTS.

NEW YORK, September 1, 1887.

DEAR SIR,—The twenty-first annual convention American Institute of Architects will take place in Chicago on Wednesday, Thursday and Friday, October 19, 20 and 21 ensuing.

In advance of the detailed programme which, as soon as some points in abeyance are decided, will be issued by the Committee of Arrangements—Messrs. W. L. B. Jenney, E. T. Littell, H. L. Gay and the secretary—the undersigned wishes sometimes to call special attention to the occasion, which promises to be one of great interest and enjoyment. The architectural development of the great City of the Lakes, particularly perhaps, in its business buildings, has of late years been very notable, and will be seen under the best auspices, the Illinois State Association of Architects having passed a resolution expressing its "great pleasure in extending to (us) a hearty welcome," and having appointed a committee to act in concert with a corresponding committee of the Chicago chapter of the institute, "in providing a suitable entertainment to the invited guests."

The Western Association of Architects have appointed their president, Mr. Root, their secretary, Mr. Alexander, and their ex-president, Mr. Adler, as their representatives at our convention; and on a recent official occasion, the first alluded to it as one "which may pave the way to some possible union of the two associations, which will be a benefit to all," and the last as "an occasion which we may hope to see bring the institute into closer relations with the Western Association, possibly resulting ultimately in both associations forming under one organization."

The secretary has been in correspondence with some of the most prominent practitioners in the country in reference to getting brief practical papers, treating of important buildings or other architectural subjects with which their experience has rendered them familiar, and has already the promise of several. In addition to these there will be presented the opening address of President Thomas U. Walter, LL.D., the annual reports of the various chapters, and of the board of trustees and standing committees, as well as several proposed amendments to the by-laws, and other routine matter.

It is proposed also to collect illustrations of the works of members for exhibition, first at the institute convention, and afterward—by request of the Western Association of Architects—at their convention in Cincinnati, opening November 16 ensuing. The illustrations may include any form of rendering, whether drawings, photographs, photo-gravures, or the results of any other of the various processes in vogue, and whether in whole or in part of the work delineated, but only such as represent work executed within the last ten years are desired.

The undersigned will be glad to hear, at the earliest possible moment, from members as to what illustrations they propose to send; as, also, from those to whom he wrote

under date of August 10, in relation to the professional papers before mentioned; and in view of inquiries made by some of the latter, he wishes to repeat that a short paper will be preferable to a lengthy one, and that when there is only leisure for a mere statement of the paramount requirements of the subject suggested, it will be entirely acceptable; nor is it essential that the papers be forwarded before October 12, though it will be convenient to have them earlier.

Referring to his letter, also of the 10th ult., to the presidents and secretaries of the various chapters, the undersigned begs to remind them of the suggestions therein made. Any reports or communications for the Committee of Arrangements, which cannot be mailed in time to reach the secretary, in New York, by October 15, may be forwarded to Mr. H. L. Gay, 15 East Washington street, Chicago.

Respectfully yours,

A. J. BLOOR, *Secretary A. I. A.*

This circular was followed by the one giving exact information and general programme, received October 8, printed on page 37.

At a meeting of the Board of Trustees A. I. A. held September 22, the following candidates were elected fellows:

M. L. Beers, D. H. Burnham, H. L. Gay, H. W. Hill, Wm. Holabird, J. W. Root, S. V. Shipman, J. L. Silsbee, and Alfred Smith, all of Chicago.

The following were elected associates:

Otis Dockstader, Elmira, N. Y.; Alfred F. Pashley, Chicago; Geo. W. Bunting, Oscar D. Bohlen, R. P. Daggett, James B. Lizius, J. H. Scharn, Adolph Scherrer, all of Indianapolis, Ind., and Chas. P. H. Gilbert of New York City.

The societies of architects, in Washington, D. C., and Indianapolis, Ind., were, on application, admitted as chapters of the Institute.

The officers and members of the Washington Chapter are as follows:

J. L. Smithmeyer, president; W. M. Poindexter, vice-president; Glenn Brown, secretary; C. A. Didden, treasurer. Professional members: J. L. Smithmeyer, F. A. I. A.; John Moser, F. A. I. A.; O. Von Nerta, A. A. I. A.; S. M. Howard, A. A. I. A.; W. M. Poindexter, A. A. I. A.; J. A. Henry Flemmer, J. R. Marshall, C. A. Didden, A. A. I. A.; Glenn Brown, F. A. I. A.; C. H. Reid, T. F. Schneider, A. A. I. A.; Robert Stead, Wm. Kirkus, Jr., Henry H. Low, Paul Schultze, Adolph Cluss, F. A. I. A.; Jos. C. Hornblower, J. West Wagner, Will A. Freret, Edward Clark, H. L. Page, H. H. Kendall.

The secretaries of the A. I. A., the W. A. A., the A. L. N. Y., and of each chapter of the Institute are *ex-officio* corresponding members.

The membership of the Indianapolis Chapter consists of the gentlemen in Indianapolis just elected to Associateship in the Institute, together with Mr. D. A. Bohlen, F. A. I. A., its president, Mr. Lizius being the secretary.

WESTERN ASSOCIATION OF ARCHITECTS.

The following circular has been issued by the secretary, and is especially interesting to architects who contemplate applying for membership.

WESTERN ASSOCIATION OF ARCHITECTS,
Secretary's Office, Lafayette, Ind.

NOTICE OF DIRECTOR'S MEETING.

Mr.
DEAR SIR,—The Board of Directors of the Western Association of Architects will meet in Chicago, Illinois, October 18, 1887, for the transaction of general business. All matters for the consideration of the Board of Directors at this meeting must be filed with the secretary on or before October 15, 1887.

At the last annual convention of the Western Association of Architects, Article X was added to the by-laws, which reads as follows:

ARTICLE X—BY-LAWS.

"All names of candidates are to be presented to the Board of Directors, and by them sent to all members of the association thirty days before the meeting of the convention."

The requirements of Article X are imperative that all applications for membership must be filed with the secretary on or before October 15, 1887. This will be the last meeting the Board of Directors will call preceding the annual convention, which meets in Cincinnati, Ohio, the third Wednesday in November.

The Board of Directors earnestly request that copies of the reports of each committee be filed with the secretary on or before October 15, 1887, so that the Board of Directors will have ample time to examine and compare reports and correspond with committees.

JAMES F. ALEXANDER,

Secretary Western Association of Architects.

Lafayette, October 10, 1887.

Members who wish to bring matters before the Board of Directors will also take notice that the last meeting of the board before the annual convention occurs October 18.

The following circular has been issued by the directors of the Western Association, and is deserving of the special attention of every member of the national and state associations:

WESTERN ASSOCIATION OF ARCHITECTS.

SECRETARY'S OFFICE, Lafayette, Ind.

DEAR SIR,—The Western Association of Architects was organized to encourage the development and progress of architecture, and to establish uniformity of action and understanding among the architects of the West and South, so that their combined influence should tend to elevate professional standards throughout the country.

Believing comparison and consultation to be among the best methods to induce interest in the growth of the profession, in behalf of the American Institute of Architects, which will hold its twenty-first annual convention in Chicago, Ill., October 19, 1887, we extend to you a cordial invitation to send to the committee in charge of the drawing exhibit at the Chicago convention such pencil or pen-and-ink sketches, water color drawings, photographs and models of a few of the buildings designed and executed under your supervision during the past ten years. It is the hope of the association that the exhibition at the convention will be, in all its departments, unusually full and widely illustrative, so that architects from all parts of the country, whether members of the American Institute of Architects or not, will have an opportunity for a wide survey of the work done throughout the country during this period of time. Your cooperation in this, which we believe to be a very important work, will be highly appreciated.

The A. I. A. will pay all costs of transportation to Chicago and return, as well as charges for boxing, shipping, hanging, etc.

Should it be your pleasure to contribute to the exhibition, will you kindly send all drawings or photographs to Henry Lord Gay, Committee on Drawing Exhibits, 15 East Washington street, Chicago, on or before October 14, 1887.

The American Institute of Architects will also be gratified to have your presence and coöperation at the next convention, which we trust will be one of interest and significance.

JOHN W. ROOT, President, W. A. A.,

115 Monroe street, Chicago, Ill.

D. ADLER Chairman Board of Directors, W. A. A.

58 Borden Block, Chicago, Ill.

J. F. ALEXANDER, Secretary, W. A. A.,

Cor. Fourth and Main Sts., Lafayette, Ind.

HENRY LORD GAY, Chairman Committee on Drawing Exhibit,
American Institute Architects, 15 East Washington street, Chicago, Ill.

WASHINGTON CHAPTER A. I. A.

The architects of Washington, D. C., organized a chapter of the American Institute of Architects August 11, and were admitted to membership to the A. I. A. by its board of trustees, September 21. The officers

are: president, J. L. Smithmeyer; vice-president, W. M. Poindexter; secretary, Glenn Brown; treasurer, C. A. Didden.

Professional members: J. L. Smithmeyer, John Moser, O. Von Nerta, S. M. Howard, W. M. Poindexter, J. A. Henry Flemmer, J. R. Marshall, C. A. Didden, Glenn Brown, C. H. Read, T. F. Schneider, Robert Stead, Wm. Kirkus, Jr., Henry H. Law, Paul Schultze, Adolf Cluss, Jos. C. Hornblower, J. West Wagner, Will A. Freret, Edward Clark, H. L. Page, H. H. Kendall.

Junior member: Thomas Francis, Jr.

Corresponding members, *ex-officio*: A. J. Bloor, secretary A. I. A.; J. F. Alexander, secretary W. A. A.; C. I. Berg, secretary Architectural League, New York; E. M. Wheelright, secretary Boston Chapter A. I. A.; Alfred F. Pashley, secretary Chicago Chapter A. I. A.; Arthur Truscott, secretary Philadelphia Chapter A. I. A.; J. A. Wilson, secretary Baltimore Chapter A. I. A.; Chas. Crapsey, secretary Cincinnati Chapter A. I. A.; E. L. Nickerson, Secretary Rhode Island Chapter A. I. A.; B. E. Hendricksen, secretary San Francisco Chapter A. I. A.; H. W. Kirchner, secretary St. Louis Chapter A. I. A.; J. H. Stem, secretary Indiana Chapter A. I. A.

The chapter has printed in neat pamphlet form its constitution and by-laws, with extracts from the by-laws of the Institute bearing upon the formation of chapters, and in reference to memberships as fellows and associates, and the schedule of charges formulated and adopted by the Institute October 23, 1884, since adopted by the Western Association and fourteen state associations.

THE ARCHITECTURAL LEAGUE OF NEW YORK.

An annual competition has been established by the League, and the following announcement and programme is received:

The Architectural League takes pleasure in announcing that it has instituted, in connection with its exhibition, an annual competition, open to all draftsmen in the United States under the age of twenty-five. The object of such competition to be the promotion of good design and the improvement of draftsmanship.

As prizes, it offers to the design placed first, a gold medal, to be known as The Gold Medal of the Architectural League; and to the design placed second, The Silver Medal of the Architectural League.

The conditions for admission to the competition are:

First—That the competitors shall be residents of the United States, and under the age of twenty-five; and,

Second—That the drawings shall be made in conformity with the following programme, and, in all parts and portions, entirely by the hand of the competitor.

The drawings will be judged by the jury appointed for that purpose.

The successful drawings, and such others as may be thought worthy, will be hung at the exhibition, the first and second prize drawings being so indicated, and these latter shall thereupon become the property of the League.

CHAS. I. BERG, *Secretary.*

JOHN L. DU FAIS, *President.*

For the First Annual Competition the following programme has been arranged: The drawings shall exhibit a "Memorial Clock and Bell Tower on a Village Green."

The tower to stand on a base which shall not exceed the dimensions of a square of twenty-two (22) feet.

Each contributor to exhibit two sheets of drawings: one to contain plans and elevations at the scale of four feet to the inch, and one to exhibit a perspective view. The plan and elevation sheet to be finished in line with India ink and the lining pen. No brushwork on this sheet, except in blacking in windows and sections. No shadows are to be cast.

The perspective sheet to be rendered at will.

Each sheet to be cut to the uniform size of 24 x 32 inches, and to be white card or Bristol board, or Whatman paper, mounted on stretcher. No colored borders, frames or glazing will be allowed.

Each sheet must be distinguished by a motto or cypher. A sealed envelope, bearing the same motto or cypher, must contain the name and full address of the author.

Drawings are to be delivered flat, carriage paid, on or before December 5, 1887, to Chas. I. Berg, Secretary, 152 Fifth Avenue, New York City. They will be returned at the close of the exhibition at the expense of the contributor.

WM. C. HAZLETT,
JOHN L. DU FAIS,
CHAS. I. BERG, } *Committee.*

Rock Asphalte in the Phenix Building.

AMONG many systems of roofing and the different materials used in their construction, Neufchatel and Seyssel rock asphalte, such as used in the Phenix building, is rapidly gaining in favor where a permanent and thoroughly fireproof roof is desirable. Taking, for example, that placed upon the Phenix office building, recently completed at Chicago, under the plans of Architects Burnham & Root. This is laid upon fireproof hollow tile, leveled up with cement, and thoroughly resists the action of the elements, neither sun, rain nor frost affecting in the slightest degree the uniformity of its surface. While giving to builders a roof that is as permanent as the building which it covers, Neufchatel and Seyssel rock asphalte is being largely used for other purposes. Simpson Bros., of Chicago, who furnish and lay the material, have just closed a contract with the Conrad Seipp Brewing Company for one of the largest rock asphalte flooring and roofing jobs yet laid in this country.

The adaptability of this material for brewery, cellar, laundry, or stable, store and mill floors lies in its permanent character, and the facility with which it can be laid over cement, brick or wood, equally well in winter or summer, and its being both waterproof and fireproof.

The basement and vault floors of the Phenix building are also covered with this material, and its use is increasing as rapidly as its valuable qualities become known.

NEXT to the unconquerable stovepipe, the sliding door has come in for more victories over man than any other house belonging. Who has not encountered this foe? True, some thoughtful men have gained some slight advantages over it, and made its uncertainties less certain, but it has evidently been left for the Climax Rail Co., of New York, to put this foe to tranquillity in well-ordered households *hors de combat*. Wherever it has been used, and it has been used quite extensively, it has won golden opinions from architects, builders and the indwellers of homes. It is a floor rail, that is, is put level with the floor, and the device is such, that the door cannot jump the track or become jam-locked. Moreover it can be put in any house, old as well as new, and in the former case without disturbing the casings or marring the paint. In a word, it is, if architects' words are to be taken for the truth, and they are, "the right thing in the right place,"—that is when put there.

American Institute of Architects.

IN accordance with the previous notice of September 1, the twenty-first annual convention of the Institute will be held on Wednesday, Thursday and Friday, October 19, 20 and 21, 1887, at Chicago, in the rooms of the Literary Club, in the Art Institute, corner of Michigan boulevard and Van Buren street.

ORDER OF PROCEEDINGS.

FIRST DAY—MORNING SESSION, 10 A.M.

1. Opening Address, by President Thomas U. Walter, LL.D., or, in his absence, by First Vice-President Edward H. Kendall.
2. Report of the Board of Trustees.
3. Report of the Treasurer, and appointment of Auditing Committee thereon.
4. Reports of the standing committees on (a) Education and (b) Publications.
5. Reports of the chapters in Baltimore, Boston, Chicago, Cincinnati, Indianapolis, New York, Philadelphia, Rhode Island, San Francisco, St. Louis and Washington.
6. Report of the Secretary for Foreign Correspondence.
7. Appointment of Nominating Committee for the election of officers and standing committees for the ensuing year.
8. Reports of Special Committees:
 - (a) On Bill to provide improved methods in the Architectural Service of the Federal Government; in conference with Special Committee of the Western Association of Architects.
 - (b) On Architects' Protective Associations.
 - (c) On providing a Permanent Home for the Institute.
 - (d) On a Building Contract for use throughout the United States; in conference with Special Committee of National Association of Builders, United States of America.
9. Appointment of Special Committee for the Consideration of all Reports presented to the Convention.
10. Communications, Announcements, and Miscellaneous Business.

RECESS.

The Convention, as the guests of the Chicago Chapter of the Institute, and of the Illinois State Association of Architects, will, after each morning session, take lunch together; and on such afternoon as may be announced at the first session, their hosts will drive them to points of architectural interest in the city and its vicinity.

EVENING SESSION, 8 P.M.

Exhibition of illustrations of work executed, within the last ten years, by such practitioners as may have responded to the official invitation to be issued by the Western Association of Architects, and of which preliminary notice, at the Association's request, was given by the secretary of the Institute in his circular letter of 1st ultimo, to Institute fellows and associates, to whom it is herewith reinforced.

SECOND DAY.—MORNING SESSION, 10 A.M.

1. Unfinished business.
 2. Amendments to By-Laws.
 3. Report of Nominating Committee.
 4. Report of Special Committee, for the consideration of reports.
 5. Election of Officers and Standing Committees.
 6. Reading and discussion of papers.
- The following papers, among others, on themes suggested to the authors, have been promised, and several are already in the hands of the Committee of Arrangements:
- By Mr. D. Adler, Fellow, on "Theaters."
- By Mr. M. E. Bell, Fellow, late Supervising Architect of the U. S. Treasury Department, on "The National Building Question."
- By Mr. W. W. Boyington, on "Differences between the Methods of Architectural Practice prevalent now and fifty years ago."
- By Mr. D. H. Burnham, Fellow, on "Suggestions toward the best and speediest methods for harmonizing and utilizing all the agricultural societies in the United States, so as to secure the most good for architecture, for the public and for the profession in America; due regard being had, as concerns means, alike to individual energy and enthusiasm, and to associative experience; and, as concerns ends, alike to local sentiment and to national reputation."
- By Mr. J. C. Cady, Fellow, on "Opera Houses."
- By Mr. Charles H. Harn, on "Manual Training as applied to the Building Arts."
- By Mr. John Moser, Fellow, on "Federal Buildings for Judiciary Customs and Postal Service."
- By Mr. J. L. Smithmeyer, Fellow, on "Library Buildings."
- By Mr. J. M. Wilson, Fellow, on "Where the line of demarcation between Engineering and Architectural Practice is to be found."
7. Communications, Announcements and Miscellaneous Business.

RECESS—LUNCH.

EVENING SESSION, 8 P.M.

1. Unfinished Business.
2. Reading and Discussion on Papers Continued.
3. Communications, Announcements and Miscellaneous Business.

THIRD DAY.—MORNING SESSION ONLY, 11 A.M.

1. Unfinished business.
2. Reading and discussion of papers concluded.
3. Miscellaneous subjects and discussions.
4. General business, communications, announcements, resolutions of thanks, and adjournment.

[SEAL.]

October 1, 1887.

W. L. B. JENNEY,
E. T. LITTELL,
HENRY LORD GAY,
A. J. BLOOR, } Committee
on
Arrangements.

There are two eligible hotels—on the European plan—in the immediate vicinity of the convention's place of meeting; one the Leland Hotel, Michigan boulevard, corner Jackson street, where rooms may be had from \$1.50 per day upward; the other, the Richelieu Hotel, Michigan boulevard, between Jackson and Van Buren streets, where luxurious quarters may be had from \$2.50 to \$20 per day.

Visiting members will find, at the meeting room of the convention, a Visitors' Book, in which they are particularly requested to register, promptly on arrival, their addresses, both at home and in Chicago; residents of Chicago will also please register.

Although, owing to the impossibility of getting the promise of attendance at the institute conventions in sufficient numbers, as well as to the widely separated points from which members—often but a single individual from one place—start for the point of meeting, it has hitherto been found impracticable for the successive committees of arrangements to secure a general system of reduced rates for railroad travel; it is nevertheless suggested—and it has indeed been found feasible in several cases heretofore—that, if the various chapters, each in its own locality, will organize a visiting delegation to the convention, they may, through their local business and social connections, induce the railroad officials, in their several places of residence, to reduce rates for a dozen, or even for half a dozen, friends or acquaintances to a figure which would be refused to an isolated individual, and a proposition for which, unless on the understanding of tickets being taken by the hundred, as usual where conventions are concerned, would receive no attention whatever if made by a distant committee of arrangements.

All reports or communications for the Committee of Arrangements should be mailed in time to reach the secretary, A. J. Bloor, 18 Broadway,

New York, before the 14th instant, so as to give the committee time for study and proper classification before leaving for the convention; but when delay beyond that date is unavoidable, they may be forwarded direct to Mr. H. L. Gay, 15 East Washington street, Chicago. He will also, on account of the Institute, receive illustrations for the exhibition hereinbefore mentioned.

They should be in his hands by the 12th instant, and an invoice thereof should be mailed to him.

Our Illustrations.

Residence for Ferd. W. Peck, Chicago; W. L. B. Jenney and William A. Otis, architects.

Oliver Wendell Holmes' hospital, Hudson, Wis.; L. S. Buffington Minneapolis, architect.

Competitive design for Grace Church, Kansas City, Mo., submitted by Burling & Whitehouse, architects, Chicago; one of the firms specially invited.

Accepted design for Grace Church, Kansas City, Mo., submitted in competition by A. Van Brunt, architect, who was also one of the specially invited competitors. Proposed cost \$117,000, which does not cover the cost of the tower beyond the first story, nor the windows.

Levi theatre for Emanuel Levi, Buffalo, New York; W. W. Carlin, architect. The building will be laid up in dark red pressed brick in red mortar, trimmed with red Medina sandstone, left with bold rock face and finished with bush-hammered jambs with tooled moldings, carved capitals, etc. The contracts for the mason work, carpenter and joiner work, iron-work, painting and glazing, etc., have already been placed, amounting to about \$80,000.

Physical and Hygienic Laboratory building for the University of Michigan, at Ann Arbor, Michigan; Pond & Pond, architects, Chicago, Ill.; greatest dimensions, 115 by 72 feet; exterior, red brick in white mortar, red sandstone trimmings and columns, Vermont green slate; interior, maple floors, red oak and clear pine trimmings finished in oil, inner side of exterior walls and most cross and partition, walls in red brick with struck joint. To cost, exclusive of apparatus, \$30,000.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Houses for Alexander Campbell, Chicago; Furst & Rudolph, architects.

Library in residence of Hon. C. B. Farwell, Chicago; Treat & Foltz, architects.

Residence for William Borden, Chicago; Richard M. Hunt, architect, New York.

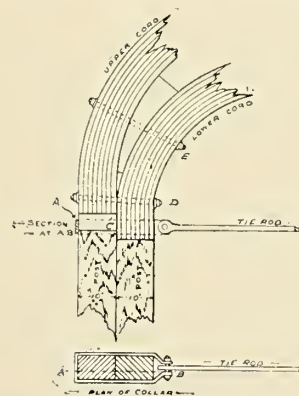
Residence for Robert Strayhorn at Kenwood, Ill.; Burnham & Root, architects, Chicago.

Memorial Hall, Garrett Biblical Institute, Evanston, Ill.; W. W. Boyington, architect, Chicago.

Correspondence.

Editors Inland Architect:

The following peculiar condition of a roof truss, and the novel method of overcoming the difficulty may be of interest. We were called upon to inspect a building and suggest temporary repairs.



The roof trusses were of the bow string type, not particularly well proportioned or constructed. A settlement of the truss at the center and a bulging at the haunches, together with the end of the upper chord having been cut a little short, had tended to draw the foot of the upper chord out from the collar or yoke of the main tie-rod at A, as shown in the above sketch. Fortunately the shoulder at C and the bolts D and E prevented the whole truss kicking outward to the destruction of the building, but danger still existed, as the collar had only a slight hold on the post, and might work up and slip through C, a distance of ten inches. The foot of the trusses were very inaccessible, but it was possible to get at them sufficiently to fill the space C with a mixture of iron filings and sal ammoniac, well rammed into place, forming a solid block of iron cement, thus giving a full bearing for the collar and truss, without the difficulty of taking out the walls of the building and the risk of disturbing the trusses.

Yours truly, CONSTABLE BROS.

[We regard such contributions as the above as exceedingly valuable, and hope to receive more of such from architects when peculiar problems in construction come within their practice or observation.—EDITORS INLAND ARCHITECT.]

Mosaics.

THERE is a good demand for first-class draftsmen on the Pacific coast. Architect C. E. Apponye, 25 North Spring street, Los Angeles, California, wants two good men.

EDWARD D. ADAMS, a New York banker, has raised \$100,000 by subscription, which he hopes to make \$200,000, for the erection of a large building and gallery for instruction in art and the founding of an American salon. It is a worthy undertaking, and ought to succeed.

THE Star Steam Heater Company, of Mt. Joy, Pa., addresses the plumbers and steamfitters of the country, through the medium of a circular letter, calling their attention to the special merits of their improved Star Steam and Hot Water Heaters, which is meeting with unqualified success wherever it has been introduced. The claims of the company for their magazine heater are presented logically, and are worthy of careful consideration by builders.

THE illustrated catalogue of Edwin Louderback & Co., of Philadelphia, manufacturers of sliding blinds, Venetian blinds, window screens and shades, and also of combination blinds, is received. Illustrations of Hill's sliding blinds are given, and particular attention is called to the Philadelphia Venetian blinds, manufactured by Louderback & Co. An experience of twenty-five years in the manufacture of these and similar fixtures, with special and improved machinery, is a guarantee of first-class work, and their ability to forward them at a minimum cost.

FASHION and wealth create new industries. It is only recently that the industry of architectural brasswork has acquired large proportions. Now our public buildings and residences are incomplete without artistic brasswork. Chicago has at once jumped to the first rank in this industry, and some of the most important contracts in the country have been intrusted to Chicago firms. The Union Brass Works are at present busily engaged in manufacturing the bronze stairway for the United States Custom House at Baltimore. To give some idea of the extent of the contract it may be mentioned that there are five hundred balusters at \$13 apiece, and twenty-three newels at \$300 each, and the total amount is over \$11,000; the same company is furnishing a large counter for the Dakota Loan and Trust Co., of Watertown, Dakota, which, when completed, will be probably the finest counter in the country. There are fifty-four feet at \$76 a foot, or nearly \$4,000. With the bronze work on the American Bank, of Kansas City, and other large contracts the Union Brass Works cannot complain of dull times.

IN other countries the general use of hardwood lumber is taken as a matter of course. But little more than ten years since it would have been hard to find a firm in Chicago doing business in hardwood lumber exclusively, except perhaps for use in the manufacture of furniture. Today this is entirely changed. No house of any pretensions is erected that has not more or less hardwood trimming, and usually in the entire trimming as well as the floors nothing but hardwood is introduced. This is not altogether because the architectural taste has changed, but largely because many of the hardwoods, such as maple, ash, oak, and even cherry, can be furnished dressed for less money than the same grade of soft pine can be obtained. One firm, and probably the largest in the line in the West, Hayden Bros., have a yard covering six acres of ground, in which there is nothing but hardwood lumber. The yard is centrally located, with ample track facilities, and within it is piled over six million feet of hardwood lumber of all descriptions. Sheds are built for the storage of fine mahoganies, etc., and large drying kilns enable the firm to deliver kiln dried lumber on short notice, and not only supply the local market, but ship to all parts of the country.

It is always a satisfaction to call attention to a device of merit wherein the necessities of the people are met, especially home needs, and in this issue of this journal the attention of architects and the builders and owners of homes is called to a unique laundry stove and clothes dryer, manufactured by the Chicago Laundry Dryer Company, which has proved to fill a long felt want among housekeepers wherever it has been introduced. The device comprises a stove and drying apparatus attached; the former furnishing every convenience necessary in a laundry stove, such as boiling the clothes, providing any desired quantity of hot water by a water-back system, and the heating of sadirons, the latter an apartment or addition in which the clothes are dried after washing by a constant current of heated air passing through, heated from the ordinary fire of the stove, and the whole at a minimum cost of fuel. Thus, in a very limited space, is furnished the most complete laundry outfit that has yet been offered to the public, so that whether the weather is stormy, or rainy, or the air is filled with dust, soot or smoke it matters little to the possessor of one of these, as the work can be done within doors without tumult or annoyance of any kind, be the washing large or small. It is only necessary to say that this laundry stove and dryer has been especially designed for residences, flats, apartment buildings, hotels and public institutions to recognize the field of adaptability covered by the originators and inventors.

NOTHING in connection with architecture has developed more rapidly and with greater variety than modes for building ornamentation, interior and exterior. The strides from crudeness to perfection, when one stops to consider the first beginnings of many of the standard appliances and their present status is simply amazing. These remarks are inspired by the receipt of the fifth edition of Messrs. Bakewell & Mullins, of Salem, Ohio, illustrated catalogue of the various products of their extensive establishment for the manufacture of building ornamentation, in brass, copper and zinc, and which strikingly illustrates the assertion made at the outset of this article. Such architects, builders and metal workers who have not received this edition should procure a copy at once as they will find it a very treasure store of suggestions in house ornamentation that will challenge their highest ideas of novelty and beauty as well as of art. The illustrations are superbly produced, representing an almost infinite variety of details, for interiors and exteriors, ranging through the line of full length statuary, busts, animal figures, bas-relief panels, spandrels, frieze pieces,

cornices, blocks, quoins, garlands, festoons, brackets, consoles, medallions, heads and faces, capitals, rosettes, corbels, bracket leaves, mansard leaves, frieze and belt enrichments, panel ornaments, angle ornaments, gargoyles, scrolls, crestings, finials, etc., together with many specimens of spunwork. In point of fact, for artistic outlines and exquisite finishing, it would seem these manufacturers have reached the climax of perfection of metal furnishings, and have provided in advance for any probable emergency.

Building Outlook.

OFFICE OF THE INLAND ARCHITECT, }
CHICAGO, Ill., October 8, 1887. }

The building activity continues unabated in nearly all the larger towns and cities of the United States. Enterprise has not taken any relation as yet at the rumors which have checked activity in one or two other directions. Architects and builders have an abundance of work in sight for the winter and spring. The probabilities are that the same activity will continue throughout all the next year. There are some reasons to be considered why less building will be done. Low wages and cheap material have always stimulated enterprise; high wages and dear material have, after a certain time, checked enterprise. The cost of building at this time is very little, if any, more than a year or eighteen months ago. Nearly all kinds of building material remain where they were, and the demand for houses, shops, factories and for mechanical power is on the increase. Railway construction is being pushed as rapidly as labor or material can push it. It is very true that a number of important enterprises have been for the present dropped. These enterprises may be taken up within thirty or sixty days or perhaps not until next spring. It is estimated on good authority that there are 30,000 miles of road projected which will be built during the next two years. The distribution of the population throughout the West and South is the strongest guarantee that house, shop and mill building will be prosecuted next year with as much vigor as it has been this year. Diversification of our industries is advancing at a very rapid rate, and is laying the foundation for permanent activity. The report of building operations from states east and west shows that a larger amount of work has been done this year than last. All of the houses built have been promptly and well rented. Houses have sold rapidly at good prices. There is still a demand for more room, and as long as this demand exists we can rest assured that building enterprise will not abate. The New England states have had an exceptionally busy time in manufacturing, and there has been a steady extension of mill and shop capacity. This has been followed by an unusual degree of activity, house building throughout the middle states and our advices are to the effect that more house and mill building has been done this year than ever. It is also stated on good authority that a minimum amount of work is projected for next year. The mills of New York and Pennsylvania are all crowded with orders ranging from one month to six ahead. The ship yards on the Delaware have more work in hand than they have had for years. The boat yards along the lakes are also crowded with orders. The car works throughout the interior are unable to accept all the orders proffered. This general condition of vigorous activity is almost a sure guarantee that the coming year will be an exceptional one. The only possibility of disaster is to be found in a stringency in the money market. We have an assurance that the government will do all in its power to aid us when a stringency is threatened. It is to be regretted that our financial system is in need of government aid at any time. The population throughout the West within the past two years is developing in the markets, and is equalizing the productive points between manufacturing and agriculture. Low prices have prevailed, but enterprise has not been discarded. New schemes are constantly coming up calling for more money, more material and more labor. This year's railroad mileage will probably reach eleven to twelve thousand miles. Locomotive building will exceed last year's output by fifteen per cent. Productive capacity is being extended very rapidly and in the opinion of many too rapidly for permanency. No serious question divides the sentiments of the people, and no threatening obstacle stands in the way of our progress. With an abundance of cheap building material, with an abundance of iron, steel, hardware, lumber, coal and all that goes into building and manufacturing, we could not anticipate any serious falling off in the demand or break up of the confidence which has been growing steadily for three or four years past. The labor question may and probably will give employers a great deal of trouble in the future, but boards of arbitration have been established in different cities, and they are rendering good service. Employers themselves are more united than ever, and are standing like their workmen, shoulder to shoulder for their mutual protection.

Synopsis of Building News.

Arkadelphia, Ark.—Architect B. J. Bartlet, of Little Rock, has prepared plans for the Ouachita Baptist College, 74 by 90 feet, three stories, brick; estimated cost, \$15,000; contract will be let about October 15.

Baldwin, Kan.—Architect Geo. P. Washburn, of Ottawa, reports: For School Board, two-story brick and stone school building, 60 by 78 feet; cost, \$10,000; under way; Geo. Miller, contractor.

Batesville, Ark.—Architect B. J. Bartlet, of Little Rock, has prepared plans for Mr. Hanaford, for a frame dwelling, to cost \$3,500; contract not let.

Boone, Iowa.—Architect F. D. Hyde, of Dubuque, reports: For Catholic Church, two-story brick school and sisters' residence, 47 by 47 feet; cost, \$7,000; plans in preparation.

Burlingame, Kan.—Architect J. G. Haskell, of Topeka, reports: Masonic Hall, 50 by 65 feet; cost, about \$5,000; projected; contract not let.

Chicago, Ohio.—Architect H. C. Lindsay, of Zanesville, has prepared plans for a brick, stone and terra-cotta school house, slate roof; cost, \$15,000.

Chicago, Ill.—Architect A. Bessler, reports: For Dr. Frank McCormick three-story brick and stone building, 22 by 56 feet; cost, \$4,800; under way. For Frank Senft, two-story brick and stone building, 24 by 70 feet; cost, \$5,400; under way. For Charles Schroeder, two-story frame, 22 by 48 feet; cost, \$3,500. For Jacob Schultz, three-story and basement flats, 22 by 68 feet; cost, \$5,600. For S. Kerwin, three-story flats, 21 by 58 feet; cost, \$4,000. For Henry Hoppe, two-story store and flat, 25 by 90 feet; cost, \$7,000. For Christ Menks, two-story flats, 22 by 48 feet; cost, \$3,500; two-story and basement flat building, 22 by 56 feet; cost, \$4,500. For Mrs. M. A. Egan, two-story and basement tenements, 22 by 62 feet; cost, \$3,800. For J. P. Werner, three-story store and dwelling, 25 by 43 feet; cost, \$6,300. For Elwood & Nitz, two-story store and dwelling, 48 by 70 feet; cost, \$10,000. For John Riordan, three-story tenement, 22 by 66 feet; cost, \$1,200. For Frank Wozeschki, two-story store and flats, 22 by 70 feet; cost, \$4,500. For Frank Kudra, two-story flats, 22 by 58 feet; cost, \$4,000. For Andrew Muehlhausen, two-story store and dwelling, 24 by 67 feet; cost, \$4,800; also several less important buildings.

Architect Fred Keltchen reports: For Adolph Metzger, two-story brick store and flat, 24 by 66 feet; cost, \$5,800. For Henry Wolf, three-story store and flat building, 25 by 78 feet; cost, \$8,500. For S. Granick, four-story store and flats, 25 by 80 feet; cost, \$12,300. For Weber Wagon Company, at Auburn Junction, wagon works plant; cost, \$80,000. For William Stoltz, four-story and basement carriage factory; cost, \$18,000.

Architect F. R. Shock reports: For Mrs. C. M. Brooks, three-story store and flats, 25 by 84 feet; cost, \$7,000. For Austin Library Association, two-story library, hall, etc., 70 by 130 feet; cost, \$25,000. For B. Crane, two-story summer cottage, 40 by 65 feet; cost, \$25,000. For J. J. Lindman, three-story stone front residence; cost, \$12,000. For F. R. Millard two-story flats, 25 by 72 feet; cost, \$6,000. For Mr. Fitzgerald, two-story residence; cost, \$5,000. For H. F. Frink, two-story cottage at Austin; cost, \$4,000. For M. Bailly, two-story cottage at Oak Park; cost, \$4,000. For Mrs. Shock, two-story cottage at Austin; cost, \$4,000.

Architects Froman & Jebson report: For George W. Ferris, two-story dwelling, 22 by 44 feet; cost, \$4,000. For O. Allen, two-story dwelling; cost, \$8,000.

Architect L. G. Halberg reports: For B. F. Felix, three-story residence; cost, \$20,000.

Architects Edbrooke & Burnham report: For William Hill, two three-story dwellings; cost, \$20,000.

Architect C. O. Hansen reports: For P. Christenson, three-story stores and flats; cost, \$14,000.

Architect L. G. Halberg reports: For John Erickson, three-story store and flats; cost, \$5,000.

Architect Austin Moody reports: For W. H. Davis, six-story warehouse, 75 by 100 feet; cost, \$90,000.

Architects Holabird & Roche report: For J. R. Walker, two-story residence, 32 by 80 feet; cost, \$11,000.

Architect P. W. Ruehl reports: For Louis Schafer, three-story flats, 48 by 56 feet; cost \$10,000. For J. Ebner, three-story store and flats, 26 by 78 feet; cost \$9,500.

Architect L. Martens reports: For J. F. Smith, two two-story dwellings; cost \$10,000.

Architect J. H. Carpenter reports: For Proctor & Wood, four three-story dwellings; cost \$30,000.

Architects Schaub & Berlin report: For F. Koepke, two-story flats; cost \$6,000.

Architect C. M. Palmer reports: For J. S. Barnes, three-story dwelling; cost \$12,000.

Architect Henry F. Starbuck reports: For E. C. Day, three-story dwelling; cost \$7,000.

Architect G. Thiele reports: For J. Krewer, three-story flats; cost \$8,000.

Architects William Strippleman & Co. report: For C. Thielman, two-story flats; cost \$6,000.

Architect A. Woerner reports: For J. P. Prehler, two-story flats; cost \$4,000.

Architect John F. Warner reports: Three-story flat building, 72 by 100 feet; cost \$35,000.

Architects Burling & Whitehouse report: For Mrs. F. Rand, two-story flats, 42 by 70 feet; cost \$7,000.

Architect F. L. Lively reports: For J. L. Patterson, three-story store and flats, 100 by 72 feet; cost \$50,000. For H. H. Walker, two-story and basement residence; cost \$15,000.

Architect H. R. Wilson reports: For James A. Landen, eleven dwellings, to cost \$50,000.

Chouteau Springs, Mo.—Architect C. B. Lakin, of Kansas City, reports: For Stegner Investment Co., four-story frame hotel building, 100 by 98 feet, closets and baths, stained glass, steam heat, hardwood finish and tiling, electric bells, speaking tubes, etc., wood mantels, water power, passenger elevator; cost, \$25,000.

Cincinnati, O.—Reported by Mr. Lawrence Mendenhall: I do not remember of ever having given your readers any figures showing the business done in several branches of the building interests. This month I take pleasure in presenting figures taken from the annual report of the Cincinnati Chamber of Commerce, compiled by Col. Sidney D. Maxwell, its superintendent: Brick, \$759,000; building materials, exclusive of brick and stone, \$3,875,000; carpentering, \$3,617,935; cement, lime and plaster, \$85,640; cement felting, \$15,000; galvanized and sheet iron, \$931,000; glass, stained and ground, \$28,000; iron, wrought, \$849,000; lightning rods, \$150,000; locks, \$500,000; mantels and grates, \$530,000; painting, \$874,914; plastering, \$355,000; roofing materials, \$328,144; stair building, \$137,460. By the trouble (strikes) in the spring, it can be safely estimated that there was a loss of \$500,000 to all concerned. It is about time that the average mechanic was finding out that strikes have a disastrous reflex action, and that more is lost than is gained.

The bids for our expo-tion building have been laid over for consideration two weeks. There is not much to report in the way of building news, but "such as I have, give I unto thee."

Architect J. W. McLaughlin is busy on the working drawings and details of one of the exposition buildings. He has also prepared plans for a beautiful stone residence of thirteen rooms for Sol. P. Kineon, Esq.; cost about \$15,000; tiling will be used for roof. The First National Bank building is progressing, and when completed will be a great addition to our city. It is being built of red granite, the solid extension being indicative of the bank's strength financially. I consider this Mr. McLaughlin's *chef-d'œuvre* in the way of office buildings.

Architect Wm. Martin Aikin is moderately busy, and has prepared plans for a beautiful residence of fourteen rooms for Arthur M. Stem. The first story will be of brick, and the second and third stories of shingles. He has also prepared plans for additions to the residence of David Sinton, one of our millionaires. The residence is quite a historical one, having been built in 1817, when Cincinnati was an infant in swaddling clothes. Mr. Sinton bought it from Nicholas Longworth, and the interior, old-fashioned as it was, indicated ease and wealth in its furnishing.

Architect A. O. Elzner has prepared plans for residence for Geo. Pohlman, containing twelve rooms, to be built of brick and timber; cost \$7,000. The Western German Bank building, designed by him, and built of Lake Superior sandstone, is certainly an addition to the many office and bank buildings of our city recently erected.

Architect Henry E. Siter has prepared plans and the ground is broken for a new building for the Third National Bank. It will be a truly beautiful structure, three stories high, built of Anheist sandstone, with brown Ashland trimmings.

The safe deposit vaults will be very complete and commodious. Mr. Siter has been very successful in obtaining several contracts for bank buildings, everyone of which shows careful study and reflects credit upon him.

Architects Crapsey & Brown report: For A. McNeill, a frame dwelling of eight rooms, shingle sides and slate roof; cost \$5,000; contract let. Miss Lizzie B. Thorne, a brick and shingle residence of ten rooms; shingle sides and slate roof; cost \$9,000; contract let. Dr. T. A. Reamy, a brick dwelling of twelve rooms, with part hardwood finish; slate roof; cost \$10,000. W. J. Haldemann, Glendale, Ohio, a shingled residence of ten rooms, with slate roof; cost \$7,000; contract let. This firm has had their time well employed, and deservedly so, too, and have several plans on the boards now, not in condition to report.

Detroit, Mich.—Present condition and outlook excellent. Prices of labor unchanged from last report.

Architect R. F. Brooks reports: For M. T. Billings, block of three-story flats, 80 by 50 feet, brick and stone; cost \$12,000; under way; Wm. Sirloff, builder.

Architects Hess & Rasmussen report: For L. W. Barrie, two-story brick and stone dwelling, 22 by 56 feet; cost, \$3,000; under way; M. Blay, builder. For R. C. Faulconer, three-story brick and stone dwelling, 45 by 75 feet, slate roof; cost \$11,000; Clark & Vinton, builders. For Perrin Bros., three two-story stores and dwellings, 80 by 60 feet, brick and stone; cost \$10,000; under way; M. Blay, builder.

Architect Robert Parsons reports: For Mrs. L. Mitchell, three-story brick and stone dwelling, 22 by 66 feet; cost \$4,700; under way; Thos. Fairbairn, builder.

Architects Donaldson & Meier report: For Mrs. Lynn Stoward, two-story dwelling, 39 by 52 feet, brick and stone; cost \$5,000.

Architects Scott & Co. report: For fire department, two-story brick and stone engine house, 50 by 85 feet; cost \$11,287; Topping & Fisher, builders.

Architect Gordon W. Lloyd reports: For Detroit Homeopathic Association, four-story hospital building, 100 by 165 feet, brick and stone, slate roof; cost \$80,000; Alex. Chapoton, Jr., mason; Clark, Vinton & Co., carpenters; Lane Bros., plumbers.

Architects Mason & Rice report: For A. L. Stephens, two-story barn, 28 by 40 feet, brick and stone, slate roof; cost \$4,000; Spitzley Bros., builders.

Architect Mortimer L. Smith reports: For James Scott, two-story stone dwelling, 23 by 82 feet, slate roof; cost \$8,000; Patrick Dee, builder.

Geo. W. Orren is building a two-story brick and stone dwelling, 39 by 43 feet, slate roof; cost \$7,000.

E. H. Durand is building five frame dwellings, 22 by 82 feet; cost \$5,000.

H. S. Peoples is building two two-story brick stores and dwellings, 40 by 60 feet; cost \$8,000.

Henry Ohrens is building sixteen one-story frame cottages, 20 by 44 feet; cost \$9,000.

Architects Van Leyen & Preston report: For East Detroit and Grosse Point Railway Company, one-story electric light power buildings, 40 by 100 feet, and car house 30

by 100 feet, brick and frame; under way; Perrin & McKinney, carpenters; Henry Carew, mason, For Milo Schaffer, two-story frame dwelling; cost \$2,500; Peter McDougall, builder.

Leo Scheible is building a one-story German Catholic church, 44 by 90 feet, frame; cost \$5,700.

Andrew McEuhill is building two two-story frame dwellings, 28 by 46 feet; cost \$5,600.

A. Lewis is building a two-story brick and stone store and dwelling, 22 by 45 feet; cost \$3,000.

John Patterson is building a two-story frame store, hall and dwelling, 40 by 60 feet; cost \$3,000, for John A. German.

W. Diehl is building a two-story frame barn, 47 by 137 feet, for the Fort street Railway Company; cost \$3,140.

W. H. Scovel is building for Wm. Baxter, two-story brick and stone dwelling, 40 by 54 feet; also barn; cost \$5,000.

E. Nuopenen is building for himself a block of four three-story brick and stone dwellings, 89 by 42 feet; cost \$10,000.

George H. Hammond is building six one-story and three two-story frame cottages, 24 by 40 feet; cost \$6,000.

During the month of August permits were issued for new buildings, to cost \$273,137. For alterations, etc., to cost \$29,875. Total, \$313,012.

Dubuque, Iowa.—Architect F. D. Hyde reports: For Dubuque Boat Club, two-story frame boat and club house, 40 by 60 feet; cost, \$2,000; plans in preparation.

El Paso, Tex.—Architects Stewart & Carpenter report: Outlook good; boom anticipated this fall. For H. W. Myar, three-story brick, stone and terra-cotta opera house building, 106 by 134 feet, incrusta wilton decorations; seating capacity 1,500; cost, \$60,000; under way; Chas. Frim, builder. For Wells, Fargo & Co., three-story bank and express building, 66 by 43 feet, with a two-story L, 40 by 70 feet, pressed brick, stone and terra-cotta; cost, \$20,000; to be commenced December 1; contract not let. For W. J. Glenn, two-story brick store; cost, \$3,050; to be commenced October 1.

Englewood, Ill.—Architect H. Boehme, of Joliet, Ill., reports: For C. R. I. & P. R. Co., passenger depot; cost, \$2,500; under way.

Galveston, Tex.—Architect N. J. Clayton reports: In giving the list of building work now in my office in your last issue, Mr. Geo. Sealy's residence was inadvertently stated as one of my buildings. I wish to correct this clerical error and to say that I am the superintendent of construction for Messrs. McKim, Meade & White, of New York, who are the architects of this building.

Greensburg, Kan.—Architect A. J. Ashley, of Hutchinson, reports: Two-story school building, brick and stone; estimated cost \$10,000; plans just completed.

Hutchinson, Kan.—Architect A. B. Howatt reports: For Mr. Brown, three-story stone store and office building, 50 by 150 feet; cost \$35,000; nearly completed.

Architect A. Le Belle reports: The Valley State Bank building, 75 feet front, three-stories, pressed brick front; cost \$40,000; under way. For Mr. Woodward, three-story store building, 100 feet front; pressed brick front, stone trimmings; cost \$30,000; foundation under way. Also three two-story brick stores, for Messrs. Wislar, Hyde & Clymer; cost \$10,000 each.

Architect A. B. Howatt reports: For Mr. Handy, brick business block; cost \$10,000.

Architect A. Le Belle reports: For F. Hyde, brick business block; cost \$8,000; C. Richardson, builder. For J. W. Crow, two brick business blocks; cost \$16,000; G. Shears and H. Metcalf, builders.

C. Richardson is building a brick business block for H. Walker.

Independence, Mo.—Architects Nier, Hogg & Byram, of Kansas City, report: For J. Mott, three-story store building, 50 by 160 feet; pressed brick, stone and terra-cotta trimmings; cost \$20,000; plans in preparation. For W. A. Findley, D.D., two-story residence, 52 by 85 feet; pressed brick, cutstone and terra-cotta trimmings, all modern improvements; cost \$20,000; plans in preparation.

Joliet, Ill.—Architect H. Boehme reports: Outlook good. For Wade & Clement, two-story and basement stone and brick store building, cost \$5,000; under way; John Seely, builder. For David Weaver, addition to store; cost \$2,500; John Taylor, builder. For Joseph Stevens, double store; cost \$3,000; P. B. Bannon, builder. For Thomas Surple, dwelling; cost \$2,000. For Sisters of St. Francis, stone addition to hospital building; cost \$6,000; under way. Also nine depot buildings at various points on the line of the C. R. I. & P. R. R.; cost \$20,500; all under way.

Kansas City, Mo.—Architect C. B. Lakin reports: For P. W. Powers, two-story residence, 32 by 59 feet; pressed brick, cutstone and redwood shingles, slate roof, galvanized iron cornices, closets and bath, stained glass, hot-air heat, wood mantels, hardwood finish and tiling, electric bells, speaking tubes, etc.; cost \$10,000. For P. W. Powers, two-story residence, 36 by 60 feet; first story pressed brick, with cutstone trimmings; second story slated; galvanized iron cornices, slate roof, closets and bath; stained glass, hot-air heat, wood mantels, hardwood finish and tiling, electric bells, speaking tubes, etc.; cost \$10,000. For M. S. Tyler, two two-story residences, 35 by 70 feet; pressed brick, cutstone trimmings, galvanized iron cornices, slate roof, closets and baths, stained glass, hot-air heat, hardwood finish and tiling, wood mantels, electric bells, speaking tubes, etc.; cost \$10,000 each. For M. S. Tyler, block of four-story brick and stone residences, 225 by 50 feet; slate and felt roof, galvanized iron cornices, iron beams, etc.; closets and baths, stained glass, hot-air heat, hardwood finish and tiling, electric bells and speaking tubes; cost \$80,000.

Architects Nier, Hogg & Byram report: For United Presbyterian Society, pressed brick church building, 74 by 71 feet, stone and terra-cotta trimmings; cost \$20,000; plans under way.

At a meeting of the executive committee of the exposition, held September 18, Mr. T. R. Tinsley, ex-city superintendent of buildings, was appointed to relieve Architect F. J. W. Hart in the superintending of the construction and completion of the building.

La Salle, Ill.—Architect H. Boehme, of Joliet, reports: For Sisters of St. Francis, St. Mary's Hospital building; cost \$20,000; contracts not let.

Lindsburg, Kan.—Architect A. J. Ashley, of Hutchinson, reports: For Union Hotel Company, three-story brick and stone hotel building; cost \$12,800; Levi McCash, contractor, McPherson, Kansas.

Los Angeles, Cal.—Architects J. N. Preston & Son report: Present condition is good, with a large amount of work projected, which will certainly be performed if sufficient mechanics are obtainable and we do not have more strikes. For San Gabriel Valley Land and Water Company, three-story frame hotel building, 172 by 109 feet; cost \$50,000; under way; John Rebnan, builder. For H. H. Markham, two one-story frame dwellings, 30 by 38 feet, at East San Gabriel; cost \$2,500 each; under way; Jas. H. Barry, builder. For Mark G. Jones, two-story frame dwelling, 30 by 58 feet; cost \$6,500; under way; Jas. H. Barry, builder. For Bradley & Raymond, two-story frame store building, 50 by 80 feet, tin roof; cost \$5,000; projected. For G. Gilchrist, one-story frame cottage, 28 by 36 feet; cost \$2,500; projected.

Milwaukee, Wis.—Architects H. P. Schnetzsky & Co. have prepared plans for a \$30,000 schoolhouse.

Missoula, Mont.—Architects Nier, Hogg & Byram, of Kansas City, Missouri, report: For I. O. O. F., two-story brick and stone hall building, 50 by 80 feet; cost \$15,000; C. Clark, contractor; work to be commenced at once.

Mobile, Ala.—Architect James H. Hutchisson reports: Outlook very good. For T. Guesnard, two-story frame tenement house, 60 by 72 feet; cost \$6,000; J. P. Emrich & Son, builders. For Mrs. T. Dolan, two-story frame cottage, 50 by 68 feet; cost \$3,900; Wm. O. Pond & Sons, builders. For E. G. Dreaper, two-story frame dwelling, 29 by 72 feet; cost \$3,600; Wm. O. Pond & Sons, builders. Also several less important buildings, ranging from \$1,200 to \$3,000 each; all under way.

Morehead, Minn.—Architect J. W. Stevens, of St. Paul, has prepared plans for a new high school building to be erected in this city.

New Corporations.—The Grano-Metallic Stone Co., of Jersey City; capital stock, \$1,000,000; John Henry Bryant, London, Eng., Richard Irvin, Jr., John J. McCook, Robert Bliss, 30 West Fifty-eighth street, New York City, and Orestes Cleveland, incorporators. The Howard & Sprague Heater Co., of Syracuse, N. Y.; capital stock, \$50,000; Chas. D. Howard, Chas. H. Sprague, Robert Van Keuren, Bradford Kennedy and Edward C. Stearnes, incorporators. The Hohenstein Manufacturing Co., of Elizabeth, N. J., to manufacture steam heaters; capital stock, \$100,000; Theo. F. Meeker, Geo. M. Morrell and Geo. M. Ross, incorporators. The Schreiner Oil Heating Co., of Chicago; capital stock, \$10,000; J. Henry French, Joseph B. Keeler, 608 Washington boulevard, and Thomas A. Banning, incorporators. The Standard Lime & Stone Co., of Point Marblehead, O.; capital stock, \$75,000; W. A. Gamble, J. O. Sloan, W. A. Jackson, J. C. Zollinger, Byron Gager and H. O. Docker, incorporators.

Olathe, Kan.—Architect Geo. P. Washburn, of Ottawa, reports: For State of Kansas, three-story and basement brick and stone deaf and dumb institute, 104 by 160 feet, tin roof; cost \$65,000; under way; Geo. W. Goodlander, of Fort Scott, contractor. For F. R. Ogg, frame dwelling, 36 by 50 feet; cost \$5,500; under way; S. C. Pettigrew, builder. For J. W. Parker, frame dwelling, 28 by 20 feet; cost \$1,500; under way.

Architect C. B. Lakin, of Kansas City, Mo., reports: For H. L. Burgess, two-story frame residence, 34 by 60 feet; closets and bath, stained glass, hot-air heat, hardwood finish and tiling, wood mantels, electric bells, speaking tubes, etc.; cost \$7,000.

Ottawa, Kan.—Architect Geo. P. Washburn reports: For First National Bank, three-story brick and stone building, 26 by 90 feet; cost \$16,000; under way. For S. B. Rohrbaugh, three-story brick and stone business block, 50 by 120 feet; cost \$20,000; under way. For L. Shamer, three-story brick and stone business block, 50 by 60 feet; cost \$8,000; under way. For W. C. Allen, three-story brick and stone business block, 25 by 50 feet; cost \$7,500; under way. For A. F. Sharp, three-story brick and stone printing house, 25 by 70 feet; cost \$7,500. For S. G. Norris, three-story brick and stone business block, 25 by 100 feet; cost \$8,000; under way. For H. F. Sheldon, three-story brick and stone business block, 25 by 70 feet; cost \$7,000; under way. For Tom Pickrell, three-story brick and stone business block, 50 by 80 feet; cost \$8,500; contract not let. For Geo. P. Washburn, two-story brick and stone office building, 25 by 50 feet; cost \$4,500; under way. Also a number of dwellings and business houses not enumerated, and work in other places.

Paolo, Kan.—Architect Geo. P. Washburn, of Ottawa, reports: For H. C. Jones, remodeling brick and stone business house, 65 by 100 feet; cost \$5,000; J. H. Petty, contractor. For T. M. Hobson, two-story brick and stone business house, 50 by 65 feet; cost \$5,500; M. Baer, builder. For S. Baker, two-story frame dwelling, 34 by 40 feet; cost \$4,000; under way.

Pleasanton, Kan.—Architect Geo. P. Washburn, of Ottawa, reports: For S. Blue, two-story frame dwelling, 36 by 52 feet; cost \$4,500; under way; R. Kennedy, builder.

Parsons, Kan.—Architect Geo. P. Washburn, of Ottawa, reports: Frame church, 52 by 72 feet; cost \$8,000; contract not let.

Savannah, Ga.—Architects Fay & Eichberg report: For Meinhard Bros. & Co., brick store building; cost \$30,000; Henry Bartlett, contractor. For John L. Hammond, brick residence; cost \$30,000; B. R. Armstrong, mason; Henry Bartlett, carpenter; Robert Mitchell Furniture Co., Cincinnati, O., interior finish. For Lewis Kayton, brick and terra-cotta residence; cost \$25,000; John R. Eason, contractor.

Springfield, Ill.—Architect Geo. H. Helmle reports: Very little new work being done. For Miss Cora Burkhardt, two-story frame cottage, 34 by 52 feet; furnace heat, stained glass, wood mantels; cost \$3,600; plans completed. For E. H. Helmle, two-story frame cottage, 32 by 54 feet; furnace heat, stained glass, wood mantels, etc.; cost \$4,000; under way; J. L. Powell, builder. For J. O. Humphrey, two-story and attic colonial cottage, 36 by 54 feet; cost \$5,000; drawings under way. For Miss Lou Frennan, two-story and attic colonial cottage, 36 by 56 feet; cost \$4,500; drawings under way.

St. Paul, Minn.—Architect George Bergmann reports: Present condition and outlook medium. For Andrew Foos, three-story and basement brick and stone tenement, 117 by 38 feet; galvanized iron cornice, tin roof; cost \$30,000; projected; Kohlmann, builder. For A. Stathel, two-story brick and stone residence, 24 by 42 feet; cost \$5,000; Dannecker Bros., builders. For Leonard Ayd, three-story brick business building, 40 by 64 feet, pressed brick and stone front; galvanized iron cornices; cost \$12,000; Frank Hofer, builder. For George Roeler, two-story frame residence, 22 by 40 feet; cost \$4,000; Klinkerfuss, builder. For Dr. C. C. Berkmann, three-story brick residence, 26 by 46 feet; pressed brick and stone; galvanized iron cornices, gravel roof; cost \$9,000; Bassford, builder.

Architect Walter Iff reports: Dull at present; outlook good. For Hon. A. Boedghemon, residence; projected; cost not estimated. For trustees St. John's church, church building to cost \$5,000; under way; W. C. Erickson, builder. For Chas. Groff, residence; cost \$18,000; under way. For N. E. Solmon, residence; cost \$10,000; under way. For H. H. Herbert, residence; cost \$6,000. For R. Franklin, residence; cost \$5,000. For N. Rogers, residence; cost \$5,000. For Dr. Hutton, residence; cost \$5,000. For Dr. Parsons, residence; cost \$5,000. For John Rogers, Jr., residence; cost \$6,000. For Mr. Barber, residence; cost \$4,000. For a syndicate, flat building; cost \$25,000; projected.

Architect H. R. P. Hamilton reports: Prices steady; not so much talk of new work as there has been. Outlook for next season is good. For Griggs Bros., four-story brick livery stable, 49 by 100 feet; pressed and molded brick and stone front; cost \$13,000; under way; A. Boesel, builder. For Geo. W. Wentworth, two-story pressed brick and stone residence; hardwood finish; cost \$9,000; under way; Zinck & Springer, builders. For H. W. Gutsche, three-story store and flat building, 27 by 80 feet; brick and stone; cost \$7,500; under way; A. Boesel, builder. For J. W. Nabersberg, M. D., two-and-one-half-story frame residence; cost \$6,800; under way; A. Nippott & Bro., builders. For C. C. Herriott, D. D., two-and-one-half-story frame residence; cost \$3,000; stable, cost \$900. For city of South St. Paul, five two-story brick and stone school buildings, 31 by 39 feet; cost \$17,500; C. Zinck, builder. For South St. Paul Rapid Transit Co., one-story brick motor-power building, 43 by 83 feet; hardwood finish; cost \$4,700; R. E. Patterson, builder. For Mrs. Helen J. McCaine, two four-story brick and stone buildings 33 by 60 feet; cost \$10,000; under way; John Nelson, builder. Also several smaller jobs and several in prospect for next year, the foundations of which may go in this fall.

Architect E. S. Radcliffe reports: Indication good. Have several large buildings not yet ready to report. For Thos. Riley, two-and-one-half-story brick residence, 34 by 56 feet; terra-cotta trimmings, slate roof; cost \$16,000; contract not let yet. For city of St. Paul, brick and stone school building, 82 by 84 feet; slate roof; cost \$29,740; Armit & Co., contractors. For city of St. Paul, brick and stone school building, 82 by 47 feet;

slate roof; cost \$22,600; N. B. Rundell & Co., contractors. For Chamberlain & Brainard, block of three-story brick and stone stores, 60 by 75 feet; cost \$12,460; under way; M. McKay, contractor. For J. B. Hawley, frame residence, 32 by 54 feet; cost \$7,000; E. N. Armit & Co., builders. For W. B. Banks, block of tenements, 80 by 57 feet; brick and stone, slate roof; cost \$31,000. Also residence, 32 by 50 feet; cost \$5,670; plans in preparation.

Stillwater, Minn.—Architect E. S. Radcliffe, of St. Paul, reports: For the state of Minnesota, stone solitary cell building, 57 by 64 feet; cost \$42,000; under way; F. H. Lemmon & Co., contractors.

Wichita, Kan.—Messrs. Robt. Spurgin & Co., real estate dealers, give an exhaustive report of the amount of building done in Wichita in 1887 up to August 27, of which the following is a recapitulation: New brick and stone buildings, 73, valued at \$1,675,000; new frame buildings, 33, valued at \$40,000; important brick structures commenced in 1886 not yet completed, 5, valued at \$545,000; residences, 2,000, valued at \$3,500,000; total, \$5,760,000. This does not include any building not yet begun. The following are the more important buildings mentioned in the report that are not yet completed, and have not been previously mentioned in this journal:

Architects Dumont & Hayward: For Mrs. M. Zimmerly, four-story stone front block, 50 by 130 feet; cost \$40,000; to be completed November 15; Wood, Brown & Isgrig, contractors. For W. P. Stein and others, three-story brick and stone block, 100 by 100 feet; cost \$40,000; to be completed January 1, 1888; W. P. Stein contractor. For the Episcopal Church Society, stone church, 72 by 85 feet, seating capacity 900; cost \$35,000; to be completed December 15. For J. N. Bayless and others, three-story brick and stone block, 150 by 100 feet; cost \$60,000; to be completed November 1; Steinmetz & Sullivan, masons; B. R. Downing, carpenter. Wichita University main building, three-story brick, 70 by 100 feet, brick and stone; cost \$30,000.

Architect J. J. Crist: For J. W. Lamb, three-story brick and stone block, 30 by 100 feet; cost \$12,000; to be completed December 15. For the Catholic Society, Diocesan building, main building, four-story brick and stone, 45 by 80 feet; cost \$25,000; to be completed December 1. For Ben. Kelsch, two story and cellar brick and stone block, 50 by 100 feet; cost \$9,000; to be completed October 15.

Architect Arthur Peabody: For Joseph Koenig, three-story brick and stone block, 50 by 65 feet; cost \$10,000; to be completed October 15; Joseph Brandt contractor. For Gilbert Plow Co., one-story brick building, 60 by 280 feet, one-story brick building, 60 by 150 feet, two two-story brick buildings, 35 by 35 feet; cost \$15,000; to be completed December 1.

Architects C. W. Kellogg & Co: For C. C. Rushing, two-story brick and stone block, 125 by 60 feet; cost \$18,000; to be completed October 15. For H. Schweiter, four-story brick and stone block, 52 by 100 feet; cost \$27,000; to be completed January 1, 1888. For Israel & Miers, five-story and basement brick block, 50 by 120 feet; cost \$35,000; to be completed December 1.

Architect J. B. Legg: For Miller & Stowe, three-story brick and stone block, 75 by 100 feet; cost \$20,000; to be completed December 15. For Blackwelder & Rouse, five-story brick and stone block, 140 by 120 feet; cost \$120,000; to be completed January 1, 1888.

Architect W. R. McPherson: For Oscar Smith and others, four-story stone front block, 100 by 120 feet; cost \$70,000; to be completed December 1.

Architects L. C. & W. M. Bulkeley: For E. E. Cummings, three-story and basement brick and stone block, 50 by 120 feet; cost \$20,000; to be completed December 1.

Architects Proudfoot & Bird: For City School Board, brick and stone building, 72 by 73 feet; cost \$19,000; to be completed early in 1888. For D. A. Mitchell, three-story and basement brick and stone block, 50 by 100 feet; cost \$14,000; to be completed December 1. Garfield University (previously reported); cost \$200,000; not yet completed. For Rudolph Hatfield, two-story and cellar brick and stone block, 50 by 80 feet; cost \$8,000; to be completed October 15. For M. Stanton and others, two-story and cellar brick and stone block, 175 by 80 feet; cost \$25,000; to be completed November 1; Taylor & Co., contractors. For John Garrison and R. E. Lawrence, two-story and cellar brick and stone block, 75 by 80 feet; cost \$12,000; to be completed November 1.

Architects J. M. Gill & Co.: For Pearce, Pollack & Home, three-story brick and stone block, 50 by 100 feet; cost \$17,000; to be completed October 15; Green & Thomas, contractors. For P. Getto, four-story brick and stone block, 50 by 100 feet; cost \$40,000.

Architect W. M. Rapp reports: For C. E. Rogers, three-story and basement brick and stone block, 50 by 140 feet; cost \$15,000; to be completed November 15; Sullivan & Steinmetz, brick masons; Bustle & Smith, stonework; John Landis, carpenter.

Architect J. V. Majors reports: For F. W. Whitlock, four-story stone front block, 50 by 140 feet; cost \$50,000; to be completed January 1, 1888. For F. W. Whitlock, four-story granite front block, 25 by 137 feet; cost \$25,000; to be completed December 1. For F. W. Whitman, four-story stone front block, 75 by 140 feet; cost \$80,000; to be completed early in 1888.

Architects Thompson & Terry report: John Bright University, main building, 40 by 170 feet; four-story brick and stone; cost \$100,000; to be completed in 1888. For Mrs. L. C. Bird, two story and cellar brick and stone block, 50 by 80 feet; cost \$10,000; to be completed November 1; John Moore, contractor.

Architect J. F. Long, of Chicago, reports: For C. R. I. & P. R. R., two-story brick and stone passenger depot, 36 by 122 feet; cost \$20,000; to be completed October 15; A. R. Link, contractor.

The brick and stone church, 44 by 76 feet, for the Society of Friends, cost \$10,000, will be completed December 1.

The Burton Stock Car Company will complete their works January 1, 1888; cost \$100,000.

The United States custom house and postoffice, 84 by 87 feet (W. A. Ritchie, superintendent), will be completed in 1888; cost \$150,000.

Wyandotte, Kan.—Architect Geo. P. Washburn, of Ottawa, reports: For the State of Kansas, three-story brick and stone blind asylum, 60 by 100 feet; tin roof; cost \$20,000; under way; J. W. Meyer, builder.

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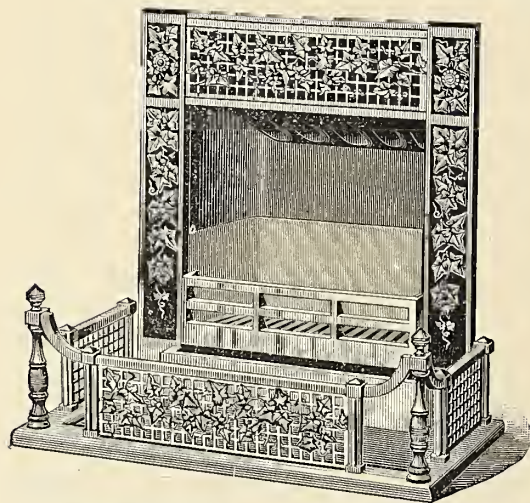
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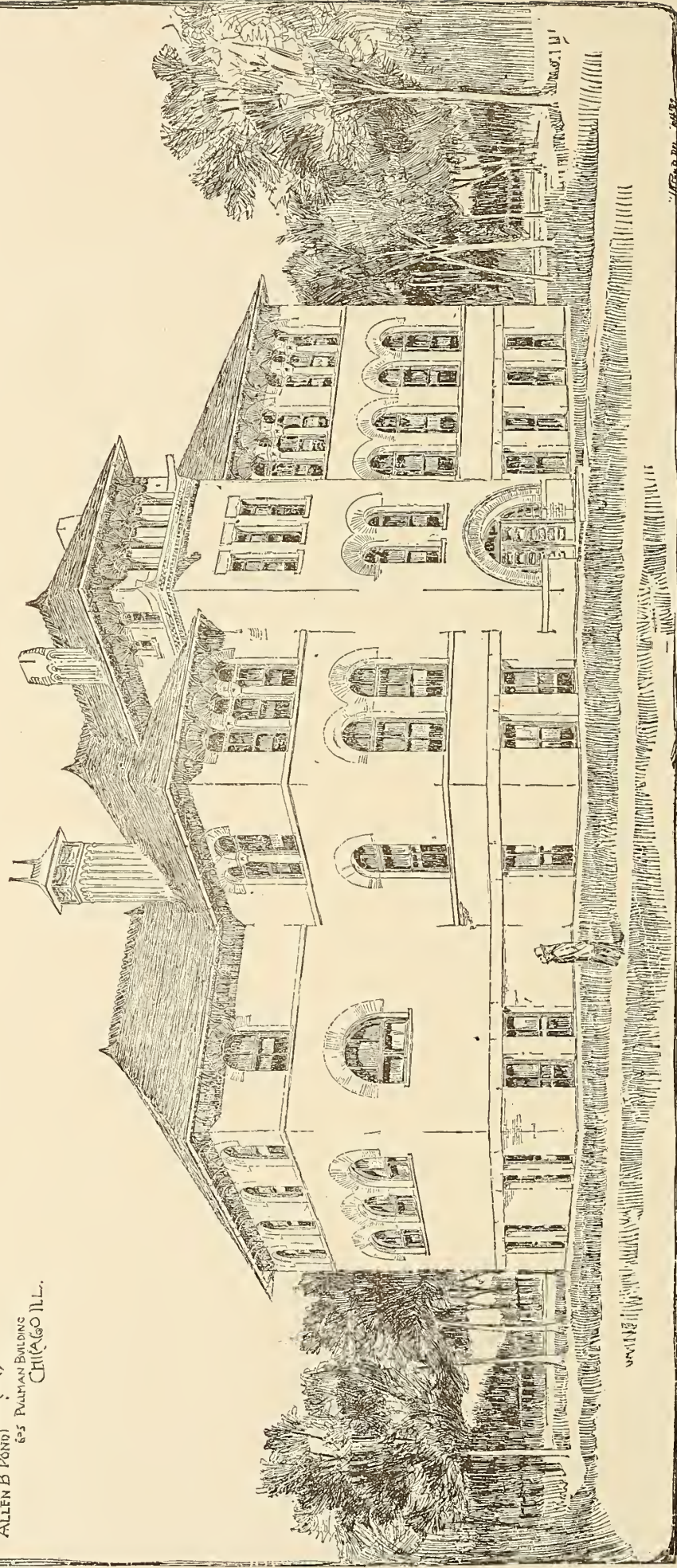
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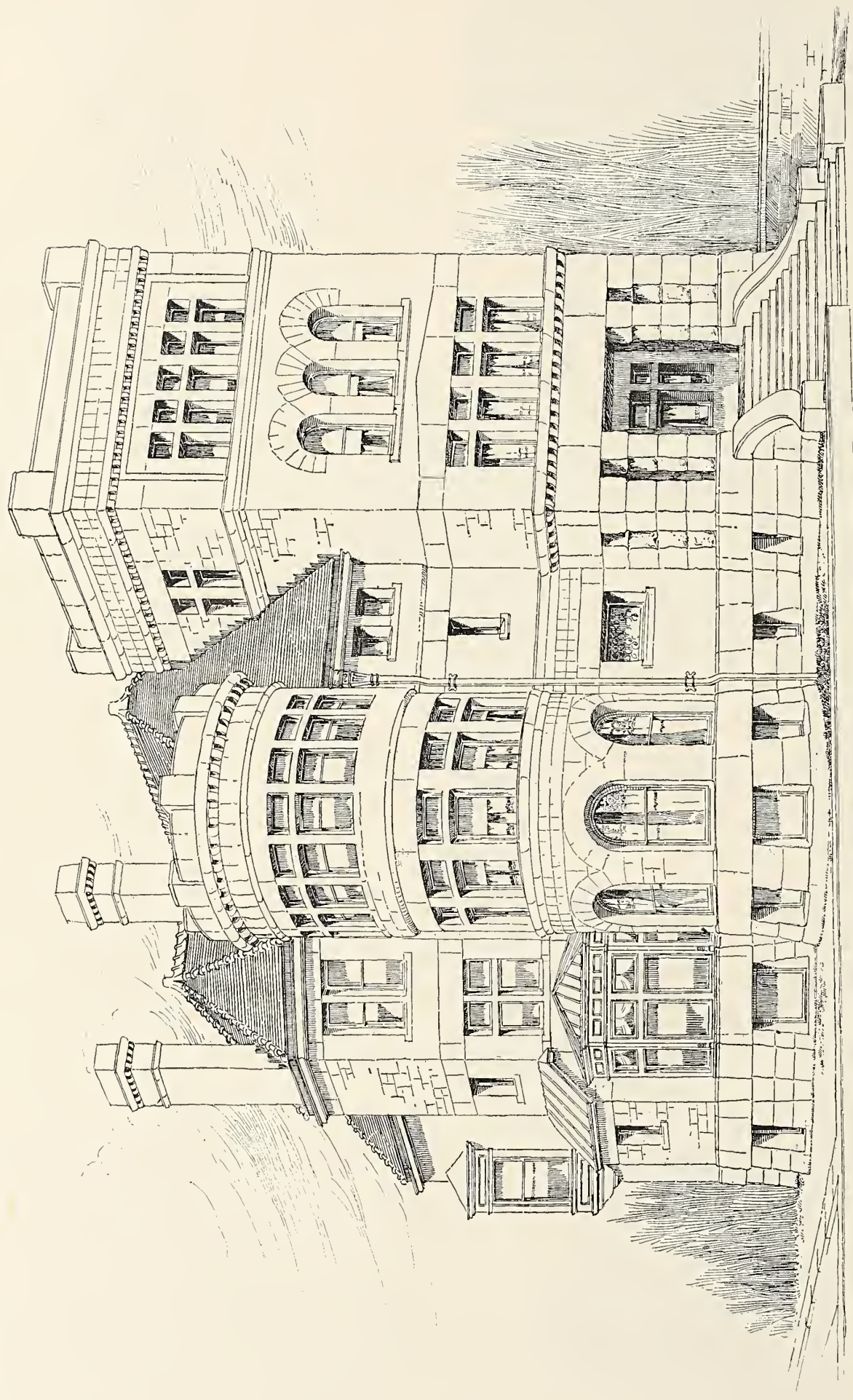


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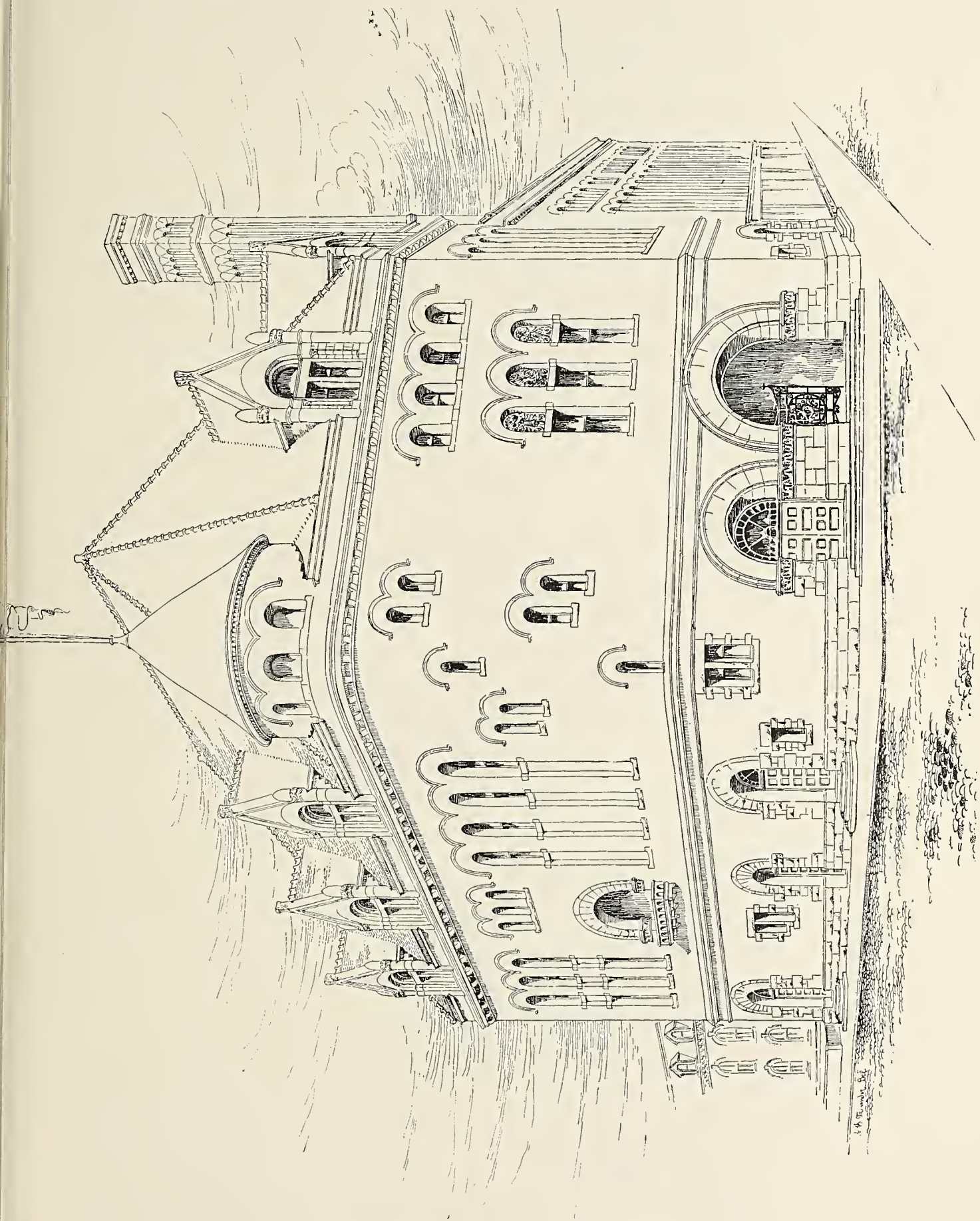
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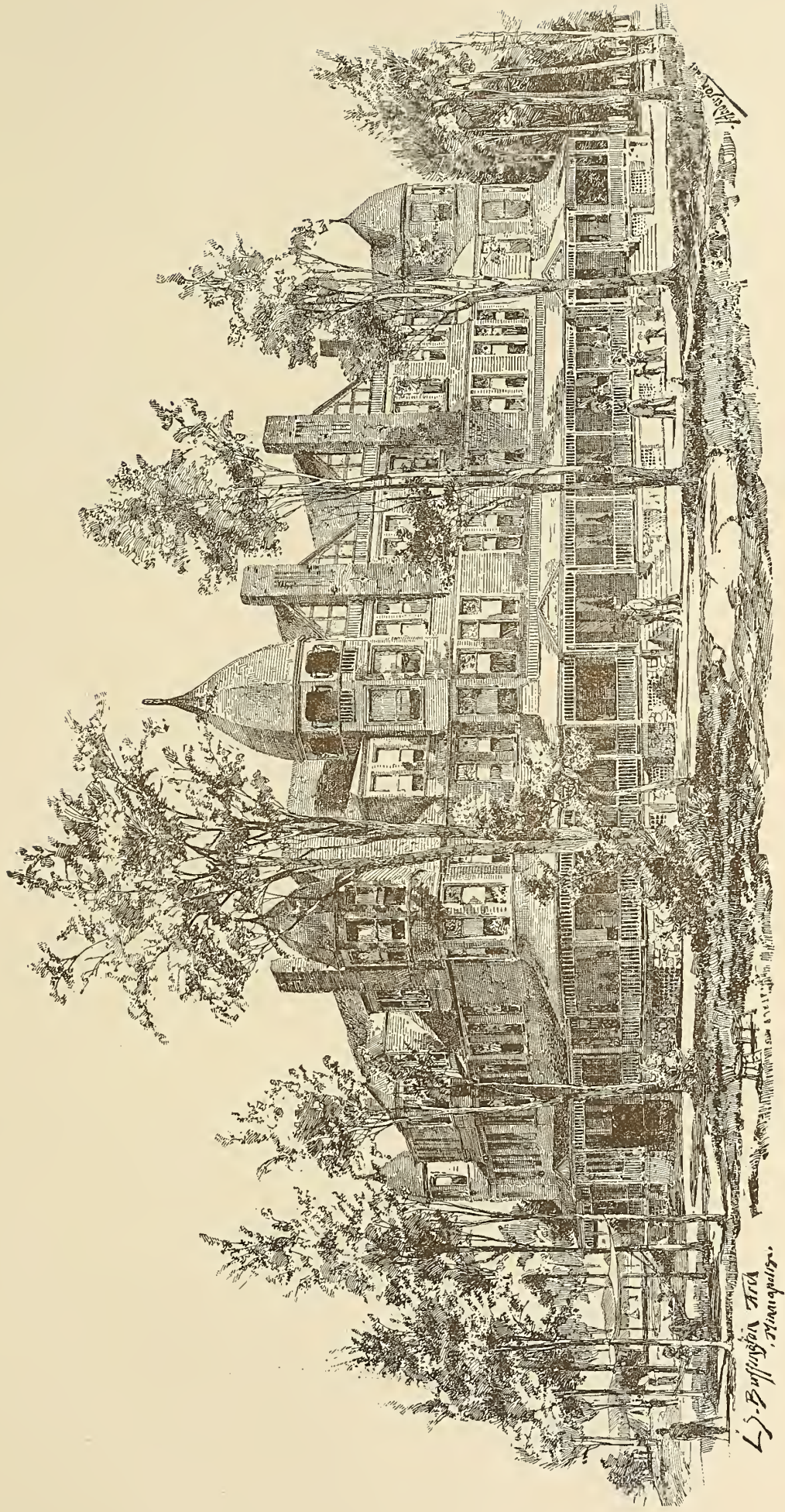


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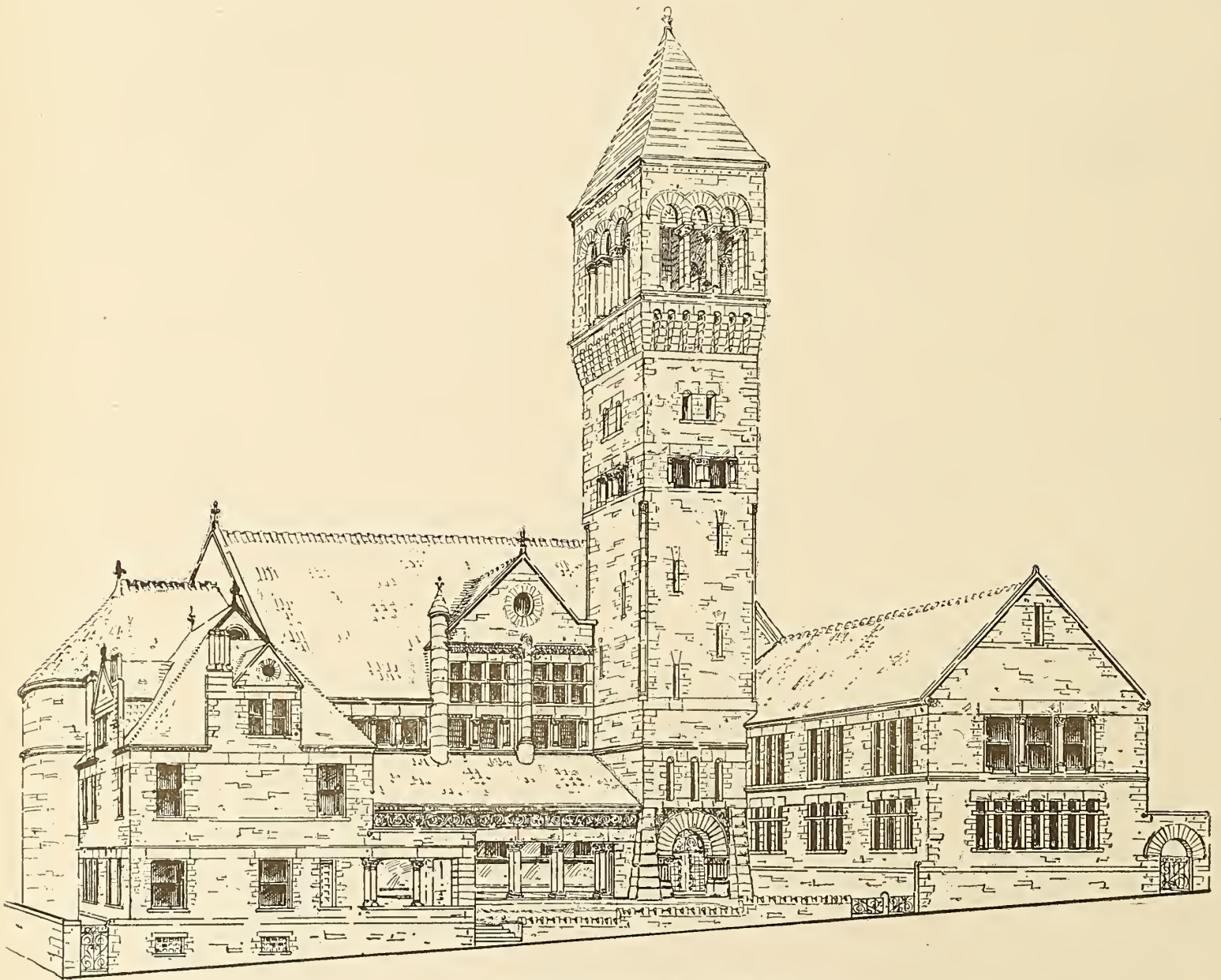
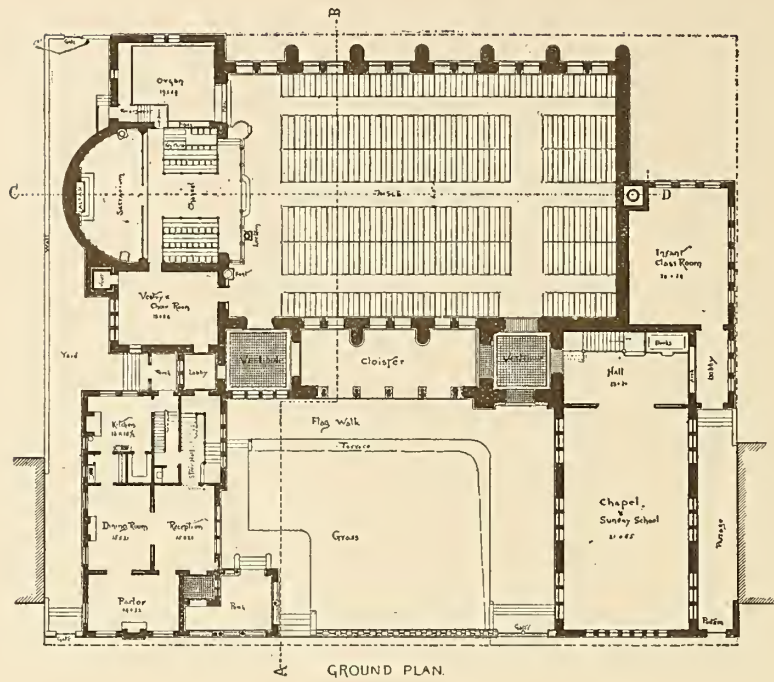
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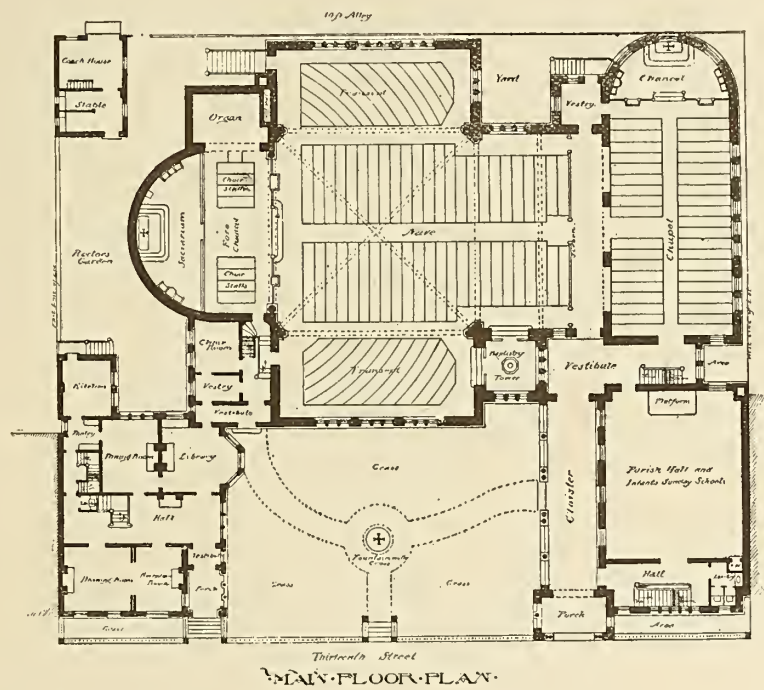
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PERSPECTIVE VIEW

ACCEPTED DESIGN FOR GRACE CHURCH, KANSAS CITY, MO.

SUBMITTED IN COMPETITION BY A. VAN BRUNT, ARCHITECT.



COMPETITIVE DESIGN FOR GRACE CHURCH, KANSAS CITY, MO.

SUBMITTED IN COMPETITION BY BURLING & WHITEHOUSE, ARCHITECTS, CHICAGO.

THE INLAND ARCHITECT AND NEWS RECORD.

INTERMEDIATE NEWS NUMBER.

Vol. X.

OCTOBER, 1887.

No. 5



ENTRANCE TO ART INSTITUTE, CHICAGO.

BURNHAM & ROOT, ARCHITECTS.

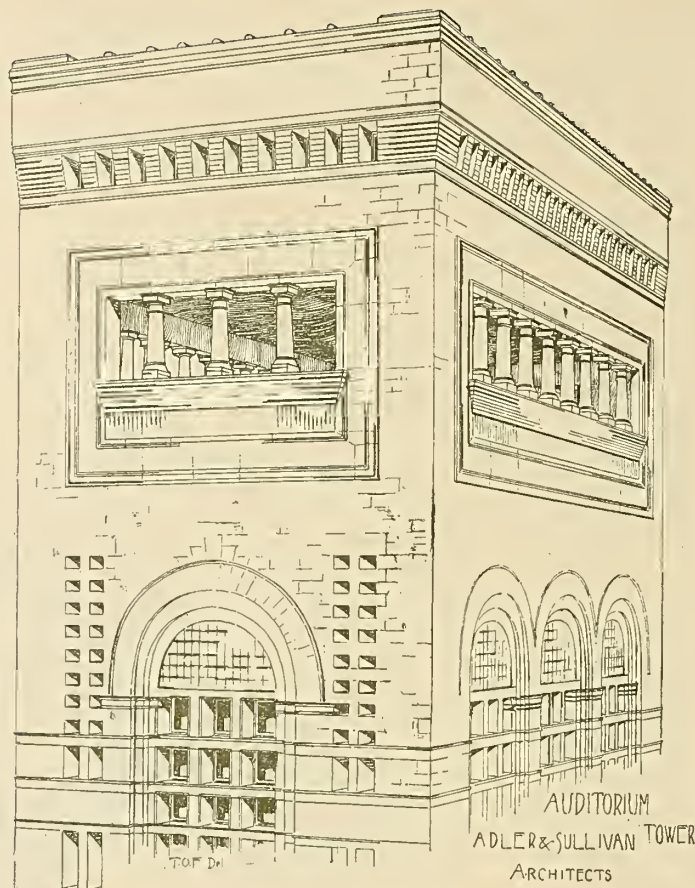
THE Twenty-first Annual Convention of the American Institute of Architects, which met at Chicago, October 19, 20 and 21, was probably the most successful of the association meetings of many years. The attendance was large, and the brightest minds in the profession were represented. The newly completed Art Institute, where the convention was held, was peculiarly adapted to the purpose. The Literary Club's apartments, in which the meeting convened, was softly carpeted and harmoniously decorated, while its large fireplaces and cheerful wood fires gave a bright and cosy air of homeliness to the deliberations. The attendance numbered sixty members, representing twenty-three cities. Of these, the farthest north was St. Paul, the farthest south Nashville, Tennessee, and the farthest west Cedar Rapids, Iowa, while the larger part of the representation was from New York and other eastern cities. In the discussions no final action was taken. The principal questions which came before the meeting, that relating to a uniform system of contracts, and that looking toward the union of the two architectural associations in the United States, together with others, being placed in the hands of committees. D. H. Burnham, of Chicago, read an able paper upon the prospects and relations which exist between the two national associations, advocating their union upon some broad

plain which will increase and preserve their activity and usefulness. We have intentionally refrained from offering an opinion upon the advisability of such a union, and as the matter has been placed in the hands of five members for joint consideration with a like committee of the Western Association, will consider it the private business of the associations until definite action has been taken by the committees. The final report will be looked forward to with much interest during the coming year, and each member should weigh the question carefully; first, from the standpoint of "Is it best?" and second (as the boards of directors of each association favor such a union), in what way can it be best accomplished. Government building received a large share of attention before the convention, first in a paper by Mifflin E. Bell, late supervising architect of the United States, followed by a paper upon the details of a model government building by John Moser, of Washington. Quite a radical change was made in the election of officers, the custom of the Institute in vogue for so many years, that of returning the same board to office, being broken. The venerable and respected president, Thomas U. Walter, of Philadelphia, having accepted the office a year ago under protest, and only upon condition that he should be relieved at the expiration of the term, Richard

M. Hunt, of New York, was elected president. A. J. Bloor, who has had more than any other member the responsibilities of the Institute upon him, asked to be relieved, and Henry J. Potter, of New York, was made secretary. Mr. O. P. Hatfield was re-elected treasurer; the board of directors and standing committees more largely express the national character of the organization by including members from the West and South as well as East. The Chicago architects entertained their guests royally. The omission of the usual official banquet, and the series of "lunches" which were inaugurated in its place was voted wise, as the sociability of the latter made these meetings, after the work of the convention, most delightful.

TO many of the architects present it seemed unfortunate that the exhibition of pictures was not made in the building where the convention was held. The duration of the convention was so short, and the time so fully occupied that the drawings and photographs sent for exhibition would have been much more generally seen had such been the case. Moreover, there were galleries in the Art Building which were vacant, and which could undoubtedly have been obtained, where some general effect of the pictures could have been made; where each picture could have been well hung; where a number of spectators could have gathered, and where would have been possible that discussion and comparison which was the avowed purpose of the exhibition. As it was, the exhibition was remote from the place of meeting, and the space given to pictures very meager. Many of the best pictures, often of notable work, by eastern architects of the highest standing, stood upon the floor, reposing against a patent blind, or slovenly supported by a new form of water-closet. On the contrary, glaring water-colors of bad designs, by totally unknown men, were given most prominent places. All this was the result of an unfortunate error of judgment in selecting the place of exhibition, which resulted in general indifference to it. Probably half of the architects present at the convention were scarcely conscious that there was even the pretense of a grand exhibition of architectural illustrations; and those who realized that there was such a pretense gained little by their knowledge, for a "private view" offers few advantages either of pleasure or profit when the spectator is compelled to stand in dark aisles, so narrow that his eye is not further than four feet from the picture. The drawings will be sent to the convention of the Western Association at Cincinnati, and though not the largest collection exhibited in the West, with the additions that will probably be made, will be one of the leading features of that convention as, but for the circumstances referred to, it might have been of this.

REPRESENTATIVES of the associations interested in the establishment of a uniform system of contracts met at Chicago, October 18. There were present, the permanent committee of the National Association of Builders, consisting of E. E. Scribner, of St. Paul, chairman, P. B. Wight and George C. Prussing, of Chicago; and the temporary committees of the Western Association of Architects (of thirteen members, representing that number of states). Architects James F. Alexander, of Indiana; H. P. McDonald, of Louisville; Eugene H. Taylor, of Iowa; G. B. Ferry, of Wisconsin, and George W. Rapp, of Ohio and of the American Institute of Architects; E. H. Kendall and A. J. Bloor, of New York. The subject was generally discussed, and the resolution passed asking that a permanent committee of three be appointed by each of the architectural societies.



Suggestions toward Harmonizing Architectural Associations.*

BY D. H. BURNHAM, F. A. I. A.

WITH so many architectural societies, filled with able men, there should be nothing too hard for us to do. But while there is good feeling between the different organizations, nothing requiring coöperation has been carried out by them. If all had the same definite views and steady purposes more would be accomplished, but until they have there will be wavering interest and semi-isolation, and lacking the weight of authority, all important efforts will be like balls shot from a Roman candle, brilliant and well directed, but without power to penetrate. A few local bodies do accomplish something in a local way, also by reading papers and by specific discussions, but this is nearly all. To go much further would need coöperation, which does not exist. Nor can national societies do much more than local ones, because they have no power to enforce their ordinances. And yet there is work to be done, which if not new, is very important to us all.

To exist, Art needs sympathy, and to grow it needs that sort of criticism which ennoble both artist and critic. Therefore kindly intercourse among architects is useful and should be cultivated; the more because social life both spurs to effort and helps one to keep a check upon his selfishness. A man when tempted may wrong his fellow, but is less likely to when both are of the same society, in which he must endure the reproachful looks and scorn of mutual friends. Members of any organization hate to fall below its average beliefs, no matter what its practice may be.

There is growing need for better training of draftsmen than our practice now affords, yet there is little chance but in offices for most of these boys to learn. They need schools or lectures, or both; but having neither, they fall far below their own possibilities. The work of changing this state of things should be ours. Where there are no technical schools we ought at least to establish some systematic method of training, perhaps by lecturing ourselves, no matter how slight or imperfect results may at first be obtained.

Since the schedule of fees was first printed our methods of work have improved. The amount of drawing alone then done on a given job in the best office would now be regarded as shamefully superficial in the poorest. It costs, not twice, but many times the sum it used to be to complete the office work of any building. We are more thorough now and should be paid in proportion.

Our efforts to throw open the government work to the profession should continue, for the public surely has a right to the talent of its greatest architects, and the profession has a right to the work. Besides, it is a fact that public buildings badly designed depress and injure the artistic sense of the whole people, instead of inspiring to better taste as good ones would. The national structures are the landmarks of our professional horizon; they are most prominent where most men are gathered together,

* Paper read before the Twenty-first Annual Convention of the American Institute of Architects at Chicago, October 20, 1887, on "Suggestions toward the best and speediest methods for harmonizing and utilizing all the agricultural societies in the United States, so as to secure the most good for architecture, for the public and for the profession in America; due regard being had, as concerns means, alike to individual energy and enthusiasm, and to associative experience; and, as concerns ends, alike to local sentiment and to national reputation."

and no one can help but see them. So for good or ill we are all profoundly affected by them.

Statutory revision is necessary, not by congress alone, but by the legislatures of every state in which the practice of architecture is not already restricted to licenses possessing competent diplomas, or who have passed examinations before state boards.

But more important than anything yet attempted to be done by any society, is the compiling and publishing of a code of ethics for architects; which of course shall show what is good, but especially what is professionally damnable in our dealings with each other. Let this be rendered in strong, clear type, and put upon the desk of everyone, and it will at once have a most salutary effect upon the fee-cutting, backbiting, backstair climbing crowd, and remove temptation from the lives of those yet uncorrupted.

To be sure the above list does not present much that is fresh. Most of the subjects have been themes for discussion this many a day, but the truth remains that we have scored very few successes with them, and have made many failures. There has been too much energy wasted, and now we ought to try and weld our heterogeneous elements into a more effective whole. There has been no lack of material or effort, but our struggles have been scattering and uncertain, so that lately our meetings have commenced to be nerveless in many cases, with a growing apathy regarding matters of reform and a growing reliance upon good social times when we meet. In fact, some of the chapters and associations are practically dead, except for banqueting and the election of officers.

As a whole, the architectural societies have had plenty of time to show what they can do. But if measured by our hopes of what we have expected, their work has not been satisfactory. We have strength enough, but it has not been brought to bear at the right time and place. No one can doubt that we have tried hard, but taking the entire record we have only won that kind of success most near akin to failure. And now three courses are left to us: To give up entirely, to go on as we are, or to reorganize. The first we cannot think of; the second we are dissatisfied with; and we must look to the last for the only chance to justify continued existence. If the latter way be chosen, it is plain that some, if not all, of the old societies must dissolve and pass away. There have been too many, and their chief faults have probably arisen from this. Since some must go, to avoid wounded pride or vanity would it not be better for all the old societies to give up their charters and for the members to join together in a single new body where shall be centered all their social activities, their art discussions and displays, their reform agitations, and finally their full authority. In this case there will be some hope for effective work on the lines of activity proper to architectural associations, and we shall have the chance to finish some of the many things we have commenced.

I do not know, in view of fresh organization, that there is today a single society or name to be kept, unless perhaps it be the title "American Institute of Architects," and this only because its dicta are the basis of so many court decisions in every state, and because its name and reputation are incorporated in the records of many foreign societies. This question, however, is for some future committee to deal with. The matter of naming is of little consequence compared to what the constitution and by-laws shall be. If the name of the American Institute or any other society be retained, it must not mean that their organization shall be kept as it is today, it must be radically different. The present condition of things is as follows: We have many societies scattered through the country, whose members have the privilege of attending the annual conventions of either one or both the national gatherings. The change should not do away with the system of local societies nor the valuable work they are capable of, for the localities in which they are established. But there should be a national controlling body in general things of practice, the members to be elected from the local ones. The annual meetings of an elected body would not be pleasant gatherings, no man feeling any particular responsibility; but earnest meetings of those best qualified to act, each one having a sense of responsibility, a clear purpose, and the obligation upon him to do hard work.

A small body of carefully selected men meeting annually for definite purposes, and intrusted with full authority is what is needed. It is not in the scope of this paper to particularize much about it or its dependent societies, any more than to say that the first should act in matters applying to all architects throughout the country alike, and the latter in matters of social, artistic and local work. How the local organizations should be formed, where and when the members of the controlling body should be elected, is matter for others to consider.

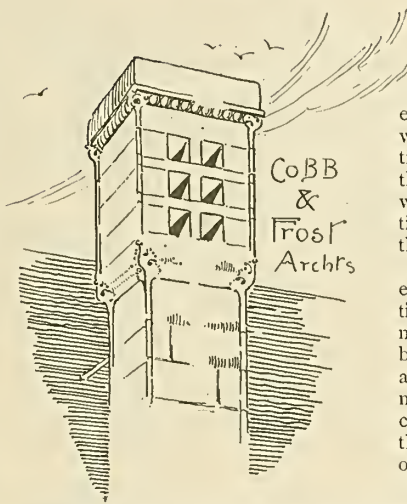
There should, and undoubtedly will be a memorial hall where may be gathered the portraits, busts and mementos of our mighty dead, and in which shall be our national archives and library. The only place where this building can be erected without raising local feeling, is at Washington, and there it should be.

The office of representative at Washington should be difficult of attainment and of high honor. I believe the men should be elected for a long term and that all elections in architectural societies, whether national or local should be absolutely without nominations being previously made. Men ought to ballot without being prompted or checked by any committee or clique, and it should be cause for expulsion for any man to be found directly or indirectly soliciting office for himself, and there should be some penalty attached to his friends doing it for him. The judgment of a society is always best as to who is fitted to serve it, if the men are left to themselves.

A committee should be appointed by this meeting to act with another from the Western Association. These two should be empowered to meet and prepare a plan and recommendation to be submitted for consideration of both bodies in 1888. They should go into the matter of advisability of a complete new organization, and of how it could be brought about; of what in the main its form should be; how first elected; how the local bodies might come in and be used, and finally should give an outline of the constitution, its work, and the chances for its being successful in the direction we shall want decisive action in.

Where the Line of Demarkation between Engineering and Architectural Practice is to be Found.*

BY JOSEPH M. WILSON, A. M., C. E., F. A. I. A.



ENGINEERING covers a broad field. One eminent as a professor and writer on this subject has said that "Engineering is the art and science by which the mechanical properties of matter are made to serve the ends of man," or in other words, it is "the useful application of mechanical science to those ends."

In the widest sense, almost every one is more or less a practical engineer, the man who makes a passage across a torrent by means of a fallen tree as well as the one who constructs the most complicated piece of machinery or rears a lighthouse on the most exposed rock of the ocean.

Little or nothing can be constructed or built without en-

croaching on the province of the engineer.

The objects treated by the science of engineering may be classified under two heads, structures and machines, the former being those "combinations of solid materials whose parts are not intended to have relative motion, and the latter those whose parts are intended to have relative motion and to perform work." A machine may be a structure, but structures are not necessarily machines. In the words of the same writer, "the theory of structures, which is founded on the principles of statics or the science of equilibrium, is divided into two parts, relating respectively to the two requisites of stability and strength; stability being the power of resisting forces tending to overthrow the structure, or to derange the parts of which it is made from their proper relative positions, and strength, the power of resisting forces tending to alter the figures of those parts or to break them in pieces."

It is evident, therefore, that the engineer to be proficient in his calling, must inform himself on the special properties of the materials employed in constructions, whether earth, stone, brick, timber, iron or other substance, as well as on the kind of treatment or workmanship to which such material may be subjected, and the form in which it may be most advantageously used. He must learn by practical experience of the action of materials under service and in all accidental conditions to which they may be exposed, and by this experience he should be enabled to allow for all such conditions and for variations which may occur in the recognized properties belonging to these materials.

Engineering is an exact science, and its application to any construction involves the principles by which the structure may be built, in the whole and in each part, according to the best design for accomplishing the uses to which it is to be adapted, and for resisting the forces that must be sustained by it. The more nearly these conditions are fulfilled, the more efficient, durable and economical the structure will be, and also to the educated or artistic eye the more beautiful, as the lines and proportions will be the best and truest to satisfy the purposes of the structure.

Engineering may be divided into two grand departments, civil and military. With the latter we need not now be concerned.

Civil engineering, in its most general signification, may be said to involve those applications of mechanics and the arts of construction which treat of the formation and building of lines of transport for freight and passengers, whether by water, highway, or railroad; the construction of works for water supply and drainage; the theory and practice of mining; and the formation of harbors and works for protection of the coast and for aid to navigation. All of these works comprise "combinations of structures and machines;" "structures in earthworks, as cuttings, embankments and reservoirs; in masonry, timber, and iron, as bridges, viaducts, aqueducts, tunnels, locks, basins, piers, and breakwaters; machines, such as carriages, locomotive and stationary engines, lock gates, sluices and valves, pumping engines and dredging machines." And in the "old days" the civil engineer was expected to be able to undertake all of these objects. In modern times, however, business has so much increased in each department that engineers can afford to devote themselves to particular subjects, and civil engineering is rapidly dividing into specialties.

One of these may be considered as involving "the laying out and constructing of lines of transport and selecting the sites for works in the best manner possible with reference to the features of the country, so as to secure economy in execution and working."

Hydraulic engineering takes up the question of water supply, and requires study of the laws of rainfall, supply and flow of streams; sanitary engineering comprises matters of drainage and ventilation; the engineer of coastworks must understand the action of waves and tides, the laws of river and ocean currents, the formation of sandbars, etc.; the mining engineer requires knowledge of sinking shafts, of tunneling, and must be familiar with geology, mineralogy and chemistry; the mechanical engineer must be able to consider all questions of machines, motive power, etc.; the electrical engineer manages all matters in the application of electricity to the uses of man; the bridge engineer constructs bridges; and the

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† Professor Rankine.

building engineer, or, may we not say the architectural engineer, takes up all questions in relation to the construction and strength of buildings.

Architecture, strictly speaking, is a fine art; as Fergusson expresses it, the "queen of the technical arts;" "the art of ornamental and ornamented construction."

While architecture has its "roots in pure utility," it is a question whether, when the first shelters were constructed, it was not engineering ability that accomplished the work, architecture only developing when man began to ornament and to decorate his constructions in order to gratify his inborn "craving for beauty and love of proportion."

The pure architect begins where the engineer ends. Without the engineer the architect would give strength to his constructions merely by satisfying his eye and sense of proportion, leaving the rest to chance. So soon as he begins to work up the sizes of the parts for the loads they have to sustain, or to consider the strength of materials and the forces to be resisted, then he becomes an engineer, an architectural engineer.

One may, by study and experience, become an expert on the subject of architectural engineering, yet never make an architect, lacking talent and artistic taste; but the field of the pure architect is a very limited one. All engineers cannot be architects, but all practicing architects must be engineers, more or less, and the more ability one possesses in this line, the more chance for his success in the great constructions of the day.

To quote Fergusson again: "It is not essential that the engineer should know anything of architecture, though it is certainly desirable he should do so; but on the other hand, it is indispensably necessary that the architect should understand construction." "Without that knowledge he cannot design." If he feels inability in this direction he should associate with one who can supply the deficiency, and reserve to himself the artistic department of the profession. It is very seldom that perfect artistic and perfect mechanical ability can be found in a single person, though if one who is an engineer by education feels that he has this artistic skill, there is no reason why he may not make one of the best of architects.

It may be seen, therefore, that no strict line of demarkation can be drawn between engineering and architectural practice; that one merges into and becomes an essential part of the other, architecture being all the more beautiful and satisfying, as well as practically correct, when its lines correspond with the lines of engineering construction. "The one is the prose, the other the poetry of the art of building."

Manual Training as Applied to the Building Arts.*

BY CHARLES H. HAM.



KEYSTONE OF VAULT
AT MAULBRONN

STABILITY, utility, beauty—these are the attributes with which the architect seeks to endow the crude materials placed at his disposal—wood, stone, and iron. They lie in a confused mass at his feet, and he is to cause them to be fashioned, piece by piece, and assign each to its due place in the structure designed for the use of man.

Turning now toward the East he passes in review the architectural triumphs of the ages, the pyramids of Egypt, the temples of

Greece and Rome, and the cathedrals of medieval Europe. Inspired by the imposing retrospect there rises before his eyes the vision of a building in which proportion, harmony and symmetry are happily blended. Fondly cherished, this child of the imagination, the shadow of a design, a filmy fancy, floats in the mind of the inventor, waiting to be transferred, a thing of beauty, to the solid earth. With an expression of rapture he essays to speak, to describe the vision he sees, but the first word sinks away into a sigh of despair.

So it was ever, from the beginning, and ever shall be to the end, that imagination halts on the verge of performance, and speech fails at the critical moment; and it is always the hand that comes to the rescue of both.

It is only with the pencil, in the trained hand, and in a universal language—a language as plain to the Russian, the German, or the Frenchman as to the American—that the divine dream of genius can be rendered visible, in lines, shades, angles and curves, to the gaze of an admiring world.

And so it is in every step of the builder's art. He who suggested that the branches of a tree be pulled downward and held by clods of earth to form a shelter, was the inventive spirit of the primitive man who shivered in the freezing blast. But he who seized the branch with his hands, and he who pinned it to the earth with a stone—these, not less than the other, made the rude house.

From the cave, and the mud hut, which protected the race in its infancy, to the sumptuously appointed city mansion of the present time, is a long progress, consisting of many steps; but these steps were not taken by the mind alone. It is only in the realms of mythology that the goddess, full-armed, is created by a thought. In real life things of use and beauty spring only from thought and action combined. In the mind of the inventor the machine is an idea, not a thing. It is the Midas-like touch of the

hand that converts the idea into a locomotive, a steamship, or a cathedral. The steam engine of Watt, Fulton and Stevenson existed dimly in the mind of Hero of Alexandria; but to develop Hero's thought required two thousand years of experiment.

So of architecture. There came a time—man having long since emerged from the savagery of the hut—when the designer of rude houses and temples, dreaming under the majestic arches, and in the long drawn aisles of the forest, saw, with prophetic ken, the sculptured splendors of the Parthenon, the vast unity of the Coliseum and the symmetrical outlines of the dome of St. Peters. How many thousand years were passed in reaching the dreamer's ideal is a secret of antiquity, destined to remain forever unrevealed. But of all the long progress not a step was taken without the aid of the hand.

From the first to the last operation in the builder's art; from foundation to turret of every edifice; from the first brick laid in the wall to the last touch of the painter's brush, the hand is the supple, cunning agent. It quarries and adjusts each stone in its place, fashions every timber, makes the mortar, carries the hod, wields the trowel, molds the glass, drives every nail.

These services are humble, but they are not mean; no service that is useful to man is ever mean. Plato's dogma, "all the useful arts are degrading," is the most pernicious as it is the most potent evil ever exerted upon the human race. It is in accordance with the eternal fitness of things that this dogma should have had its origin with a people who treated women with brutal contempt, assassinated infants, and taught their idle sons to hunt and wantonly slay peaceful slaves found toiling for their masters in the fields. But it is as strange as true that this dogma, shorn of its more repellant features, still controls, autocratically, all the colleges and universities, and most of the public schools of the civilized world, and perverts, almost beyond redemption, the mind of every youth brought under its malign influence.

But the work of the hand is not confined to the coarser departments of art. It traced on paper the builder's initial thought, a thought too subtle and unsubstantial for expression in words; and of the mind it was the confidant and coworker from the beginning, as it must be to the end; for the hand not only lays the foundation stone, rounds the dome and points the spire, but adorns with splendor every part, enriching now with chisel now with brush, overlaying all with a garniture whose design is not more chastely beautiful than finely wrought.

In the presence of the works of Phidias, of Michael Angelo, or of Meissonier, we are awed into reverential silence. We think of the products of the chisel and the brush as direct emanations of the brain. But Mr. Ruskin, with fine discrimination and insight, calls attention to the fact that "all the great early Italian masters of painting and sculpture began by being goldsmiths' apprentices, and that they felt themselves so indebted to, and formed by, the master craftsman, who had mainly *disciplined their fingers*, whether in work on gold or marble, that they practically considered him their father, and took his name rather than their own;" and Carlyle says: "Venerable to me is the hard hand; crooked, coarse; wherein notwithstanding lies a cunning virtue, indefeasibly royal, as of the sceptre of the planet. Venerable, too, is the rugged face, all weather-tanned, besotted, with its rude intelligence; for it is the face of a man living manlike."

The works of the sculptor and painter are not more direct emanations of the brain than are the humbler products of the toil of the craftsman. Both spring from that cunning virtue, "indefeasibly royal," that lies in the cultured hand. Both are essential to man's progress, and both are equally honorable.

The decrees of the ancients consigning the artisan to servitude, poverty and shame, and lifting the artist to the Throne of Things, were brutally unjust. The term fine arts, as applied exclusively to painting and sculpture, is a misnomer. The useful arts are finer than the so-called fine arts. The latter are confined within narrow limits, while the scope of the former is coextensive with the resources of nature. There is more imagination, sentiment and humanity in a locomotive or a steamship, than there is in the statues of Praxiteles, the paintings of Raphael, or the works of Shakespeare.

The relation between the useful and the so-called fine arts is undergoing a change—a transposition. The useful is about to take its rightful place in the order of excellence—the place too long usurped by the merely ornamental. In architecture the true relation between use and beauty has always been observed to a far greater extent than in any other department of art, owing, doubtless, to the law of necessity, the natural law of Vitruvius—stability, utility, beauty. The essentials are in the order here set down; in the absence of the first two qualities the last is vain. But even in an art so perfectly developed as architecture there is in progress a radical change, and it is in the direction of greater utility. Thus the world moves always toward a higher appreciation of the useful arts; and this is a natural law, for the useful arts differentiate the civilized from the savage man. They are the true measure as well of moral as of mental progress, and every step in this direction confers a new dignity upon manual labor.

We are thus fast approaching an age and condition of things when Rousseau's anathema against idleness will be accepted as an imperative social law: "The man who earns not his subsistence, but eats the bread of idleness, is no better than a thief."

Manual labor, then, being the very soul of the builder's and every other art, and the useful arts being the true measure of civilization, the coeducation of the mind and the hand becomes the first duty of society or the state. And this is plainly the road to the solution of the labor problem, for it is idle to dispute the proposition; there is a conflict between labor and capital, and it will never be settled until it is settled according to the immutable laws of justice. The way to such a settlement lies through education, such a practical training of mind and hand as shall dignify labor by enlightening it, and so lead to such a system of coöperation as shall result in the fair distribution of all the fruits of labor among those who contribute, manually or mentally, to their production.

*Paper read before the Twenty-first Annual Convention of the American Institute of Architects at Chicago, October 20, 1887.



ADLER & SULLIVAN
Archts.

The Paramount Requirements of a Large Opera House.*

BY DANKMAR ADLER.

OUR secretary has requested me to submit a paper upon "the paramount requirements of a large opera house or theater as regards site, construction, disposition of space, day and night illumination, arrangements for water supply, ingress and exit, heating, ventilation, hygiene generally, and provisions against conflagration, etc."

The following is an effort to comply with this request:

As we are all American practitioners whose work is confined within the geographical limits of the United States, and therefore within the financial and other limitations arising from our national peculiarities, I will not attempt to describe the ideal large opera house, of which so many examples exist in Europe, but will confine myself to the essentials and peculiarities of an American theater and opera house containing upward of 3,000 seats, and capable of serving also as a concert or convention hall.

The site of our building should be an open square surrounded by broad streets; and in no case must a site be chosen which does not permit the disengagement of the building on at least three sides.

The construction of such building should be of the most solid and enduring materials, so disposed as to produce a building as nearly fireproof as modern science and art can make it. The ever changing conditions of desirability of location so characteristic of American cities must be disregarded by making stability and permanence of structure paramount considerations.

In the disposition of space we are confronted by limitations which prevent the fulfillment of ideal requirements. Municipal aid is with us never extended to the builders of an opera house, which must therefore be erected by private capital, of which it seems impossible to secure as much as is required for erection and maintenance without connecting therewith some means of commercial utilization, so that a revenue sufficient for the maintenance of stage and auditorium during the unavoidable periods of disuse may be obtained.

This disposition of important parts of the ground, generally the street frontage, increases the difficulty of planning the lobbies, foyers and corridors, so desirable for a structure of this kind; but whatever the wants or necessities of the commercial adjuncts of such building, there should always be lobby space enough to hold almost the entire audience.

In determining the space to be assigned to the stage, it must be remembered that without suitable provision for presenting to the public scenic and dramatic effects on a far grander scale than can be produced in the ordinary theater or opera house, there would be no justification for the

existence of a building of the class which I am endeavoring to describe. And yet, too much space should not be assigned to the stage, as the commercial result of the enterprise must be kept in mind, and this requires a reasonable proportion between the cost of producing a good opera or a spectacular theatrical performance and the size of the audience which can be drawn to see the same. We have no subsidy from municipal or general government to make good deficiencies which would arise from the cost of performances given upon a stage of the proportions as compared with auditorium found in the opera houses of the Old World. Besides, we cannot in any city of our country maintain, still less carry with a traveling company, a permanent well-trained chorus, corps de ballet, or a corps of trained supernumeraries sufficiently large to fill a stage approximating in size that of a European house of the first rank.

A very large space should be assigned to the mechanisms for the production of scenic transformations and illusions. Nothing is more annoying to American audiences than the excessively long waits between acts so characteristic of operatic performances on a large scale as we know them on the American stage. And while the almost magic transformations characteristic of the stage of the Madison square theater are impossible of attainment under ordinary conditions, I believe that a happy mean can be found between these and the evil before referred to. One of the means of securing this end would be an effort to keep all moving and movable parts incidental to the production of scenic effects, transformations, etc., within reasonable bounds as to size and weight; and as far as possible to make transformations by upward and downward movement of the stage paraphernalia, by which means the horizontal dimensions of the stage can be minimized, although great depth below and height above the stage floor would become essentials. Liberal allowance of space for dressing rooms, and for storage of scenes, properties and costumes must not be forgotten.

It is advisable to endeavor to secure at least partial sunlight illumination of the house, and thus avoid the expense of artificial illumination for daily cleaning, rehearsals, and for daylight assemblies, such as conventions, mass meetings, concerts, etc., when scenic effects are not to be produced. This daylight illumination will be almost invariably imperfect, for corridors, lobbies, etc., and in many instances the business adjuncts of the building will cut off all means of illumination except skylights, and these can rarely be made sufficient to light all parts of the house. Means must be provided to shut off when necessary all sunlight which might interfere with the realization of scenic effects.

Day and night illumination of the auditorium and stage when occupied for a scenic representation of any kind must be by artificial light. Of the artificial lights known to us, the incandescent electric light is the only one to be seriously considered, in the design and distribution of which every effort should be made to secure a uniform and general illumination, a lighting up of all shadows under galleries, and an illumination which will reveal clearly all faces and toilets without bringing them into a trying glare.

* A paper read before the Twenty-first Annual Convention of the American Institute of Architects at Chicago, October 20, 1887.

In arranging the lights of the stage, it is necessary to see to it that the light falls upon the faces of the performers in such manner that there will be no shadows which produce distortions of their features. It is well also in arranging lights, particularly those on and immediately in front of the stage, to interpose reflecting surfaces which throw the light where it is required and shut out its glare from the direct line of vision of the audience.

In the construction and laying out of the engines, dynamos and wiring for electric light, an effort should be made by suitable subdivisions, to prevent the possible putting out of all the lights by accident to or interference with the machinery or wires. The practice of European theaters in providing as a safeguard for such contingency a system of oil lamps or wax candles arranged and always kept burning around the walls of the auditorium and in all the corridors, is worthy of imitation.

The means of ingress and egress should of course be ample. No allowance less than three feet for every two hundred persons should be considered in determining the width of aisles, doors and stairways. A large number of narrow aisles is to be preferred to a small number of wide ones. Aisles should lead as directly as possible to doors. As before stated, the corridors and lobbies should be of sufficient size to hold more than one half of the audience. The stairways must have frequent landings and the exits should be so disposed as to tend to disperse the audience as rapidly as possible.

Where audiences are very large, the means of ingress become quite important and every facility must be extended to those who purchase their tickets at the beginning of a performance, and these should be kept out of the way of persons who come already provided with tickets, and every means must be used to facilitate the entrance of the public into the building, and to prevent blocking up of halls, corridors, or stairs.

Heating and ventilation present unusual difficulties in a house of this kind. No dependence whatever can be placed upon doors and windows. The air must be warmed in winter and cooled in summer. A sufficient volume of air for comfort and for health must be forced into and removed from the room by mechanical means. The temperature and hygrometric condition of the air admitted must be under perfect control, and the means for exhausting the air must be so arranged that the vitiated air in its progress to the exhaust ducts does not come in contact with the heads of any part of the audience, and that "drafts" are prevented. It is desirable for acoustic effect, to have all air currents tending from the stage outward. It will be easiest to attain these ends if the fresh air is chiefly introduced at and from the top and in greatest volume on and near the stage, and if the exhausts are in and near the main floor and in and near the floors of the various galleries and balconies increasing in capacity with their distance from the stage. One-third of the air ducts should open on the stage, but these ducts must be under the immediate control of the prompter so that they may be closed when smoke is produced on the stage and while the curtain is lowered, and turned on again as the curtain is raised.

Wherever possible the galleries should be disengaged from the walls behind them, so as to permit the free passage of air currents through the spaces covered by the galleries.

As a protection against drafts from outdoors, there should be, if possible, at least four sets of doors between the chief lobbies and the outer air, and each of the spaces inclosed by these doors should be warmed.

The means of cooling the air for summer ventilation must be refrigerating machines. It is impossible to handle successfully a sufficient quantity of ice for our purpose. In dusty and smoky cities an apparatus for washing the air before it is introduced into the building should be provided.

As it would be too expensive to call into use the means of heating provided by the ventilating system for the daily cleaning of the house and for rehearsals, there should be a sufficient quantity of direct radiating pipes and coils on the stage and in the auditorium to warm the house to a moderate extent. These would not be used when the house is occupied by an audience, except perhaps in the coldest weather.

Foremost among the necessary hygienic arrangements is the system of ventilation before described. Next in order are the plumbing fixtures and pipes, upon which even greater care must be expended than in ordinary buildings. During the periods of disuse to which houses of this kind are subject, the evaporation of water from the traps, or syphonage of traps, or leaks of soil or waste-pipes, would produce most disastrous results. These contingencies must be guarded against with the utmost care. During these same periods of disuse in winter the danger by freezing of water in the pipes is a danger against which precautions must be taken.

The provisions against conflagration are a most fruitful topic. As it has been assumed that the general construction of our house must be fireproof, we have in this already a most potent safeguard against conflagration. If we carry this fireproof construction further and use for the framework of the stage, stage mechanism and paraphernalia, incombustible materials, and banish gas from the stage entirely, using only electric light, not only for white light but also for the effects of colored light, we shall have eliminated entirely the danger of disastrous conflagration from our house. It will, however, be impossible to avoid entirely the use of canvas for scenery, and the use of wood for the lighter and more temporary accessories of stage setting, and the large quantities of costumes and properties which accumulate about such a house are necessarily combustible. While a fire among these cannot be considered a menace to the structure, still there should be means at hand for readily extinguishing it; such as the thorough training of the stage attendants in the use of water in the tanks and pails, in the use of hand pumps, hand grenades, chemical fire extinguishers, etc.

But although the building be indestructible by fire, and although the gathering of headway by a fire is almost absolutely guarded against, alarms and frights may arise which in so large an audience would have serious consequences. A strong drop curtain of incombustible material used daily, so as to be always in readiness for instant use in an emergency, will shut off from the view of the audience the accidental burning on the stage of small pieces of scenery, etc., as may have been left unprotected. A very large and high smoke duct above the stage, the valve of which is connected with the prompter's stand, will permit the immediate and rapid escape of smoke produced by such fire, or use of firearms, etc., on the stage.

It is safe to assume that an audience in a house of this description is absolutely safe from fire; that is, that no combination of circumstances can arise by which any member of the audience can be injured in life or limb directly by the effects of the fire. There always exists, however, an element of danger in the liability in large assemblies to become panic-stricken and uncontrollable. The general solidity of construction and general safeguards against fire mentioned before will do much toward preventing a panic in the audience. Arrangements for averting the danger of the going out of all the lights in the house will eliminate another possibility of panic and danger.

The foregoing provides sufficiently for the safety, comfort and health of the audience; but all of these will be as naught unless the acoustic properties of the house are such as to permit the easy and distinct transmission of articulated sound to its remotest parts. The suggestions given under the head of ventilation will be one of the means necessary for securing this end.

In addition to this it should be said in a general way, that in the construction of the banks of the seats, Scott Russell's isacoustic curve should be adhered to as far as practicable. That wherever possible resonant materials should be used in the construction and facing; that the use of large, hard, smooth surfaces should be avoided; that walls and ceilings should be well broken; that the width and height of the house should be smallest at the stage, and that these dimensions should be increased with the distance from the stage, and that all our measures should tend toward the reduction to a minimum of the volume of air to be set in motion by the voices of speakers and singers, also to such arrangements of surface as will tend to direct the sound waves toward the audience, and such control of the air currents as will prevent the dissipation of sound waves in space.

I will add in this connection that a comparatively low proscenium and not excessively wide curtain opening is desirable as one of the first conditions of this system of construction for acoustic effect. If it is intended to use the house for conventions or concerts by mammoth choruses, the proscenium opening may be so constructed as to leave its width adjustable at pleasure, and a temporary ceiling may be suspended at or near the level of the crown of the proscenium arch over the stage and hung with a downward slant toward the back of the stage.

As I have said before, a modification of Scott Russell's isacoustic curve should be used in laying out the banking of the seats. This modification is for the purpose of obtaining an isaoptic line, and consists in lowering the level of the focus to which the curves are drawn from the level of a speaker's mouth to the floor line at the front of the stage and in substituting for a single focus at the middle of the stage, foci tending toward the side of the curtain opening for the respective sides of the house so that the focus of the curve for the seats nearest any one side is at the corresponding jamb of the curtain opening.

It may not be always practicable to follow the foregoing absolutely in the selection of foci for isacoustic and isaoptic lines, but the deviation should never be great, and the nearer the approach to these conditions the easier will be the sight lines for all occupants of the house. It will be found as one of the effects of this system that long, wide, side galleries must be banished.

As Mr. Bloor has well said in his letter requesting this paper, "style is generally conceded to be a matter of taste, chiefly dependent on education or temperament, environment of fashion, or on a combination of these, I have not included it under paramount requirements, but it is nevertheless the crowning element of an edifice in its relations with the contemporary public, and with posterity and history." And I will say upon this head only, that the general proportions and materials of construction of such a building as this justify a general simplicity and demand the utmost dignity of treatment. This simplicity should, however, not become baldness, nor should the poetic element be excluded from the design.

The Essential Features of a Large Opera House.*

BY J. CLEVELAND CADY, F.A.I.A.

WE shall best understand the essential features of a large opera house if we first consider, though very briefly, the purpose of the building.

These are three-fold—musical, dramatic, and social. The first two are realized in the production of what is termed "grand opera"; works planned upon an extensive scale, requiring large forces, both musical and dramatic, and extensive and elaborate scenery and machinery for the impressive effects desired. It will readily be seen that grand opera must be a very expensive affair; the number of artists and employes in great performances sometimes reaching several hundred. The arrangement for their proper display and action must be very extensive, and the scenery and machinery, both in variety and magnitude, far exceed what is required for other dramatic entertainments.

Preparations of such magnitude and cost for the performances very naturally demand that preparations shall also be made for a large audience to meet the expense incurred, and thus it comes about that a building for a worthy production of grand opera must be an immense one—the forces required to produce it with any degree of splendor and effect are so great that the audience necessary to support these forces must be very large, and in consequence the building of unusual size and costliness.

But so costly are these performances that even the largest audiences will not meet the expense incurred, and other sources of revenue have always been indispensable.

On the continent, government aid has been freely given, both in building and supporting immense and famous opera houses. In this country, where the government is not "paternal," aid has been found in another quarter: the wealthy, fashionable classes, who, even if not caring especially for, nor appreciating deeply the music, find it a peculiar and valuable social feature.

Its boxes afford a rare opportunity for the display of beauty and toilets.

* Paper read before the Twenty-first Annual Convention of the American Institute of Architects at Chicago, October 20, 1887.

They also give opportunity for the informal exchange of social courtesies, being open to select callers through the evening; the long waits between the acts especially favoring such interchange.

If at any time the box is not needed the tender of it to friends is a very handsome compliment, and one that can sometimes be rendered where no other would be suitable.

For these and similar reasons the opera appeals strongly to the wealthy fashionables, who are able to give it the financial support that is indispensable, and so we find the third purpose of the opera house: *the social one.*

The last feature is so important in a financial way that it naturally is the foundation of any enterprise of this kind, and in no small degree determines the size and character of the house; the promoters of the enterprise will first decide how many persons can be secured to engage boxes at a cost of some \$15,000 each, with assessments, perhaps, of \$1,500 per annum. From fifty to seventy such must be found to raise a fund sufficiently large for a building; not a monumental building, but a capacious, tasteful and fireproof structure, suitable for grand opera.

The fifty, sixty or seventy boxholders must all be eligibly located, in not more than two tiers, which goes far to establish the size of the auditorium.

From the foregoing it will be seen that provision must be made in an opera house for

1. A stage and its accessories on a grand scale,
2. For safely and comfortably seating a large general audience, and
3. For accommodating liberally and elegantly the boxholders who have built the house, guarantee it against loss, and receive their special accommodations as a return for the same.

The limits of this article will permit only a brief notice of the essential features of each of these divisions.

1. *Stage and accessories.*—The stage must be deep, to give the perspective often necessary for fine effects, as well as to permit many scenes to be in readiness at needed points; it can hardly be satisfactory if less than eighty feet from the "tormentors," or perhaps ninety-five feet from the footlights.

Its width will be governed not a little by the number of boxes and size of auditorium, but will probably be nearly a hundred feet.

It will have a deep cellar for disposing of scenery, as well as assisting in spectacular effects, and over the stage a rigging loft, etc., of great height for similar purposes. Spacious scene rooms, convenient to the stage, will be indispensable for a considerable repertoire, as well as rooms for the varied branches that are allied to the opera.

The rooms for the artists, musicians, and employés, will be simple, comfortable, well lighted, and ventilated.

The orchestra will ordinarily be placed in front of the stage, as the leader needs to direct the forces on it as well as those immediately around him; but its pit should be sunk to such a degree that (with the exception of the leader) it does not intrude its writhing, restless members between the audience and the picture before them.

2. *The general audience.*—The portions of the house devoted to it are the parquette and tiers above the boxes. They should be provided with spacious, comfortable seats (as opera performances are usually long), seats from 22 to 24 inches wide and from 37 to 40 inches from back to back. The latter figure allows passage through the rows without great discomfort to sitters.

Spacious dimensions involve cost, but it must be remembered that grand opera is by no means an inexpensive affair.

The seating of the tiers probably cannot be as liberal from back to back, as it increases the difficulties of vision.

These difficulties require most careful study to make the naturally bad seats as good as possible; where they are decidedly bad it is better to remove them entirely and use the space for standing room.

Another important provision for the audience is abundant and easy exits. If possible these should be on three sides of the auditorium, so as to avoid crowding at a few points. Staircases should be built in towers so that, were fire possible in any degree, they would protect from the noise, smoke, and elements of panic. This leads to the further point, that of safety; and for this the building should be fireproof, built almost entirely of masonry and iron, so that it should contain the least possible combustible material to feed a fire; it should be abundantly provided with water supply, and a very large iron tank at the most elevated part of the building (doubtless over the stage) to insure both the quantity and head needed.

The automatic sprinkler, from which much has been expected when placed over the stage, has proved undesirable, as the pipes filled with water (to be in readiness to work automatically) are liable to freeze, and bursting, destroy the scenery underneath.

One more point should be touched upon in regard to the comfort of the audience—the ventilation. This must be done mainly by powerful machinery forcing large volumes of fresh and suitably tempered air into all parts of the house. The products of gas combustion (if gas is used) should be drawn off as far as possible and not allowed to defile the air. In an ill-ventilated house, the long performances toward the last are hardly endurable, and are invariably followed by headaches the ensuing day; surely, the late hours demanded by the performances are quite a sufficient tax for ordinary strength without the addition of blood poisoning, or fouling.

3. *The accommodation of the boxholders or founders of the house.*—Each will have a box which gives a degree of seclusion while allowing a full display of the occupants. The boxes should command a good view; contain, without crowding, about six persons, and to avoid disagreeable jealousies, be equally desirable in size, style, etc. Each box should have a small salon or room opening out of it, to lay off or adjust wraps, etc., or to retire to if indisposed, or have a chat with friends, or partake of refreshments.

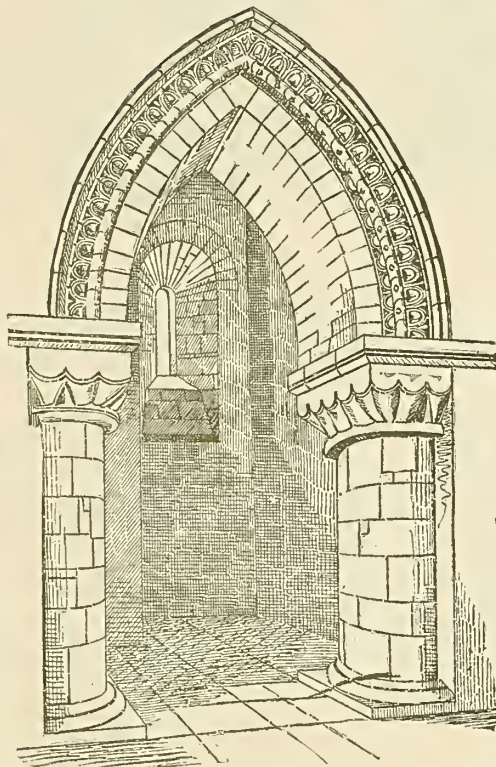
Broad corridors should connect all the several salons, for easy access and interchange of visits.

Large vestibules should be provided for those waiting for carriages; and covered driveways, that they may be reached without exposure.

A few words may be said upon the matter of style. After such a building as has been indicated has been planned, it will doubtless be found that there is little money left with which to make it a noble work of art, or a monumental work. The great amount of solid masonry, the costly use of iron in unwonted forms and shapes, the large area of costly truss-work, and the quantities of fireproofing, will rapidly consume the funds. Happy will it be if the architect acknowledges the situation frankly, and meets it in a simple manner; not doing some cheap and striking thing, or reveling in the latest architectural fashion which will shortly be despised; but following some honored and appropriate style, especially adapted to the economy he must exercise, treats the problem with a simple dignity that will not be tiresome or uninteresting as the years go by.

The Government Building from a Practical Standpoint.*

BY JOHN MOSER, F. A. I. A.



THE subject of the government building having been allotted to me, I will attempt to give a few rambling thoughts on this well-trodden field, that may prove of interest to the profession generally.

In my usual work, since I have been in the government office, I have always confined my best efforts to the successful working out of the instructions of our chiefs—here I will give you my own personal ideas on the subject as to what ought to be, regardless of what has been or is.

The plan of a building should supply all the needed accommodations, for the special purpose for which it is built. Scientific construction should give us a practical, safe, and durable house.

On the art side, the elevations should reflect the character of its projectors in a measure, and especially that of the purposes for which it is intended, and if the architect is an artist, they will also reflect his own personality. Art should aim to make the whole a "thing of beauty," with variety in unity, which when achieved becomes a "joy forever."

The common mind should not be obliged, while viewing a large building, to ask itself the question, is this a church, a castle, or a beer garden? Its forms should not only tell you what it is, but more, they should tell it in elegant and courteous language, not "ill worded" as the old English had it, instead of illiterate. The climatic conditions should never be forgotten, neither here nor anywhere else.

In order to arrive at reasonable conclusions as to the character of our building, we must consider the character of its projectors, the government, as well as the purposes for which it is built, and the situation where it is to be built.

The question, what is a government building? may be broadly answered.

It is the government place of business.

It is the government counting house.

It is the government office.

It is the government workshop or atelier.

This being the case, the utilitarian idea at once becomes the dominating one in its design and construction in a similar way as it does in the usual metropolitan office building, where everything becomes subordinate to its practical working qualities, where we want unobstructed room, plenty of clear daylight (about one-half of the outside wall space should be glass) where there is always an unlimited amount of fresh air under perfect control, all modern improvements and conveniences, and above all, every place easy of access, where you can go without an effort from one place in the building to another without the risk of accidents. It should be perfectly fire proof.

Whichever direction you may go in any of the corridors, above or below, you should always be moving toward an elevator and a stairway. These should always be together.

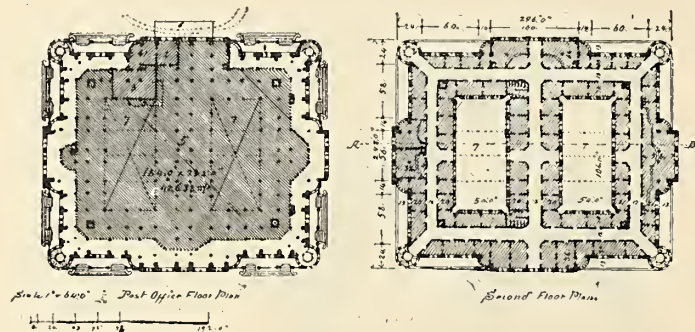
The site, though invariably decided upon and settled by the authorities before it reaches the hands of the architect, should always lie high enough for perfect sanitation, and especially central to the community which it is to serve. There is a very good law now in force, requiring all government

* Paper read before the Twenty-first Annual Convention of the American Institute of Architects, at Chicago, October 20, 1887.

buildings to have a clear air space of at least forty feet on all sides, thus insuring its absolute isolation.

The building will always be in the center of a city, where everything is most crowded, hence there is little need of studying the sky line, for it cannot be seen from any distance; it is always seen at close quarters. Washington is the only city of magnificent distances in this country, and even there you can see but little of the roof of the patent office.

Under these conditions we should make the most of what we can see, the elevations—and here let the details be so designed, that those high up are not lost any more than those near by; the failure to succeed in this has impressed many people with the idea that it should not be done and hence, little by little, we have gone toward simplicity in the higher up forms, approaching clumsiness, while the lower portions of the elevation are often very ornate. We have forgotten that the flowers bloom at the top of the bush, not at the bottom.



Construction should consist of the very best materials throughout for every purpose, and we need not go out of our country for any of these, nor in fact, for anything. All the mechanical work should be done with the most consummate skill and conscientious care, by the very best of workmen.

This building should be built to last forever. It should stand there in its perfect condition and full strength, when Macaulay's New Zealander views the ruins of London from a broken arch of the London bridge. Aside from this view it shall be built better than the common commercial building, for the question of the return per cent on the outlay does not apply here, but it should scatter the knowledge of what perfect building is, throughout the length and breadth of our land.

Special care should be bestowed upon the proper computation of all weights, strains and thrusts and ample provision made for the necessary resistance. The bed of the foundation should uniformly carry one and a half, never more than two tons to the square foot of its base. A pressed-brick pier six times its width high should never be loaded with more than fifteen tons to the square foot of its section, or one nine times its width high, eleven tons, and so on. A safety factor of six should universally be adhered to.

The force of the water supply should be strong enough to overtop the building. Firecocks, with hose attached, should not be more than seventy-five feet apart throughout the building. All watermains and pipes of every description should be so housed as to make freezing impossible.

There should be separate nests of closets on every floor except the first, the postoffice floor, one for males and one for females, with the necessary lavatories, etc., as usual in a first-class office building. The various nests of closets should be above one another, and the different pipes should be everywhere accessible. The plumbing should be thoroughly sealed and basement walls have an insulating course of asphalt to guard against capillary attraction.

Two or four ventilating shafts, six feet square inside, should run from the basement through the roof, with the usual metal smokepipe in the center and the customary ventilator on top; the smokepipe heating the air space causing a suction upward, the bottom being hermetically sealed. Separate foul-air ducts should tap the floor of every room and lead to one or the other of the stacks, thus creating a current from the floor of every room up through the roof, the size of the room determining the size of the foul-air duct leading from it. Steam heat, with direct radiation, is probably the most practical way of heating a large building; but the radiator should stand near the outside wall, and a fresh-air duct furnish the air to be heated direct from the outside, because if no air duct feeds the radiator it will draw its supply from the floor, where the worst air of a room accumulates. I am not an expert ventilating engineer, but it seems to me the whole thing in a nutshell is this: The influx of fresh air and the exit of foul should be provided for in equal quantities, forming a constant flow. Heated air of any kind will ascend to the ceiling, and gradually fill the rooms from the top downward, as a tumbler fills with water from the bottom upward. When now our foul-air exit at the floor draws out foul air equal in quantity to the fresh air admitted, a current is created which, though imperceptible in the room, is yet strong enough to carry off all the contaminated air downward to the foul-air register that may be emanating from a crowd. There are various methods of achieving this result in common practice. It matters little which method is used so long as the desired results are gained.

The ingress of fresh air should always be between two and four feet from the floor, so as not to come in contact with foul air at the floor before rising up to the level of a man's head. The world knows but little and cares less for the amount of study there has been given to this problem. Sir Humphrey Davy was one of its pioneers. He tried all sorts of experiments for years on the houses of parliament, spent a great deal of his own private money, which the government, finally, refused to refund, and I recollect a stanza of an epic poem in *Punch* deploring the condition of things, where a man of genius spends his time and money and nobody says "thank you." He had, namely, conceived the idea of admitting

fresh air through the floor, and bored holes all over it for the purpose. The poet said:

"Sir Humphrey Davy, he bored twenty thousand holes,
For which the lords paid nothing—d—n their souls."

Grates and fireplaces should be placed in all the private offices, as auxiliaries, in fact, wherever convenient room is at command. All continuous lines of rooms should have doors between them, so that through their transoms a continuous flow of air is created through the whole building.

In the arrangement of the plan ever keep in mind that everything should be roomy and ample. The smaller buildings generally have from two to three stories, the larger from four to six or more. Since the introduction of the elevator, the difference, in a practical way, between a low and a high building has been annihilated, and I will, to avoid confusion, confine my remarks to a large building, say of 200 by 200 or 250 by 300 feet.

In consideration of the fact that all our cities are increasing in size so rapidly, all our government buildings should be so designed as to have double or triple the capacity of present needs when finally completed, and then build only so much of them at the start as is actually required, and later on, in one or two instalments, the balance of it, as it shall be required, so that when all the additions are on it shall be a complete whole, instead of the first part being artistically a complete whole, with later on a lot of additions patched on.

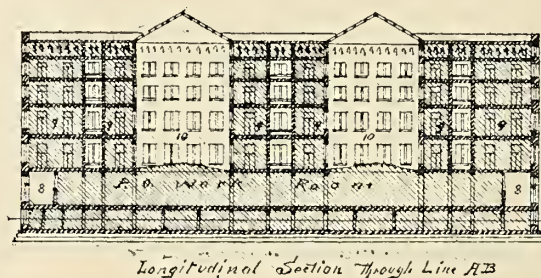
In the basement provision is to be made for one or more boiler houses, coal-pits, etc., with separate closets and exits for the employees. The space not needed for these is all fenced in for the postoffice workroom, which should contain two nests of closets and lavatories, with a separate stairway close to each, leading to the postoffice workroom above. These will accommodate all the employees of the department on both floors.

As a large building always has streets on all sides, the least frequented of these is selected for a covered delivery and mailing platform, sufficiently large to have one wagon receive and another discharge mail at the same time, all under cover. There should be two or more mail hoists reaching the postoffice workroom above, convenient to the mailing platform below.

The basement story is generally twelve feet high, half or thereabouts below grade. Steps should lead up to the main floor, which is always the postoffice floor. The only space here not belonging to it, aside from its corridors, is that occupied by the elevators and stairways, a set of which should be located at each corner of a large building. An elevator running on a skeleton frame with a circular stairway around it, is probably the most compact and practical for this purpose. As our building has streets on all or most of its sides, to be convenient it should have two or more broad sets of steps on each side, with an open covered lobby to each. If possible, most of the steps should be under cover.

From whichever direction you approach the building, as soon as you get near the house you should also be near the steps leading to an entrance, and as the "rich man," "poor man," "beggar man," "thief," all have more or less business here, it is always advisable to have as many public entrances as possible; the more entrances the more convenience. There is no use or need of emphasizing a main entrance, for the business is alike all around the house.

The building on the ground should have little or no breaks in the line; it should be as near as practicable a square or parallelogram. Breaks in the line are required further up in order to get large and small rooms in a line as required, but a straight street line is always best. If the building stands in the center of a large plot of ground, a broken line is always advisable. The postoffice to work to the best advantage requires a large unobstructed space for the workroom, as near as possible like the ring of a circus, fenced in by the box screen from the corridors around it; only one branch of it, the money order office, can successfully stand isolated from the rest, which must all be in one inclosure, or at least communicate.



The offices of the postmaster and assistant postmaster should both top the corridor on the outside and the workroom inward, and be communicating, as both those officials receive visitors from the outside and also need to be in direct contact with the workroom. The postmaster needs a small private office, with closet, etc.; the assistant postmaster needs a vault. A lookout should be provided for somewhere about the assistant postmaster's office, say eight feet high, so as not to obstruct traffic below; from this every part of the workroom, especially every clerk at his business, must be in range of vision, so that an inspector or guard can watch what is going on everywhere. If the place is too great for one lookout to see everywhere, more must be provided for. The money order, registered mail, and stamp clerks need vaults.

Along the box screen which fences in the workroom, the various clerks, for dispatch of business with the public, are located. Every part of this floor, corridor as well as workroom, when all the doors are closed should be full of daylight, no dark corners nor even dim ones. Electric light for nights and dark days. The postoffice department should be closed so that access to the workroom is only possible through the postmaster's and assistant postmaster's offices, and the mailing platform so that every person passing either in or out has to pass the scrutiny of the watch on guard.

The postoffice story should be about twenty feet high in the clear, and this space should be as little encumbered with piers and columns as is compatible with safety. Yet a word of caution here—little by little we have got an enormous structure, all on stilts; we are nearing the danger point here—“*Der Krug geht zum Brunnen bis dass er verbricht, und g'schieht nu a mal so was, ist das für G'schicht?*”

The upper floors are generally appropriated for the use of the custom house, internal revenue, pension office, signal service, courts, etc. Here we require spacious corridors clear around, communicating with the stairways and elevators at the four corridors. This will leave us a grand court in the center, or if a row of rooms and a corridor are thrown across the center of it, we will get two courts. These should be covered by a glass roof on top and a glass roof over where they strike the workroom, thus affording light to the center of the latter.

Each of these various departments requires a large communicating suite of offices with one large general office in the center. If possible, the various offices of the suite of rooms should be so arranged, that, like in a bank, you can go from one window to another and complete your business with all the departments without going out into the public corridor, which is practically the open street, inside of the house. All the chiefs should have private offices communicating with the main offices, as well as the corridor. All these should have closets with all modern improvements attached, and all clerks handling money or stamps should have vaults. Coat closets, lavatories, etc., should be found among every suite of offices.

The signal service requires a high tower. One of the corner stairways and elevators might be made high enough to overtop all surrounding pinacles for this purpose.

The upper floor is generally devoted to court purposes. Here are required two court rooms, one about 30 by 40 feet, or 35 by 45 feet. The other somewhere about 20 by 30 feet. Each should have a judge's private room (with all modern conveniences attached) adjoining one side, and a single or double office with vault for the clerks of the respective courts. The district attorney needs a large general and small private office; a commodious office for the commissioner.

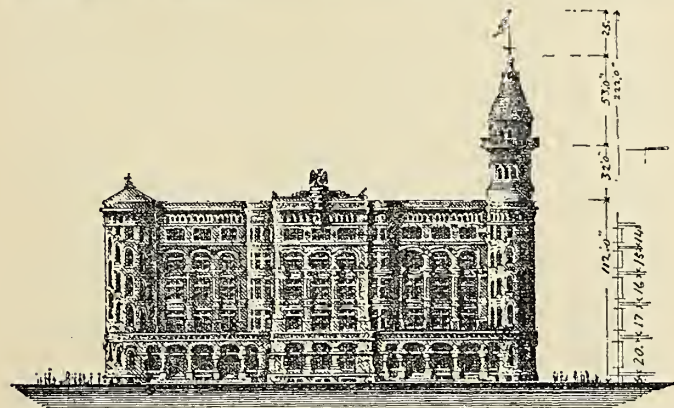
The marshal needs a general office, a private office, with a room to hold prisoners for call. There should be two rooms for witnesses, one for the grand jury, one large one for jurors. There should be two or three jury retiring rooms, one of which should be supplied with bunks to sleep in, and all to have the necessary closets, lavatories, etc.; one room for stationery, two for passed records, etc., one for the crier, a few unassigned rooms, and a suite for the janitor to live in.

The style of the building is so broad a field, that we can hardly touch upon the outer edges within the limits of this paper. The safest thing to say probably would be *de gustibus non est disputandum* yet disregarding all ideas of safety, I feel reckless enough to offer a few suggestions regarding the underlying fundamental principles that seem to have been partially or totally ignored thus far.

The elevations of a building when successful are really the crowning glory of it. As stated before, it is here, where art should crystallize to some extent the character of its projectors, but especially that of the purposes for which the building exists, i. e., government work. It is here that utility and phantasy, wedded in purity, should bring forth a “thing of beauty,” which is “a joy forever.” I also stated before the government, that building is its “place of business, its counting house, its workshop,” not its place of amusement or parade, nor its palace.

The first question that arises is, what is our government? Whom composed of? etc.

Our government is a practical, matter-of-fact, business kind of an institution; we do not recognize the value of the antiquity in families, nor respect we the length of descent. We have no noble lords nor dukes deriving their exalted rank from some bold warrior of old, or some daring buccaneer or highwayman. We are a young people without any lengthy pedigree; our genealogical tree would hardly make a decent fence post yet. Our people are our government. Our leading men who are our nobles, are such by their individual force of character, men who have carved out their own fortunes. These are the men who run our government, these are our government, and let me observe here *en passant*, no man in our day or country becomes a leader of his class without great personal force of character.



Scale 1/2" = 64' 0" Front Elevation, U.S. P.O. Customs House, Internal Revenue, Pension & Signal Service Bureau
U.S. Courts &c.

All these considerations would indicate that our building should be modern in its spirit and feeling; there should be nothing suggesting the antique, for whatever we may be, we are not antiquated in any sense whatever.

Our government is powerful and dignified, slow, but sure; hence, in a general way, the leonine character should be felt in our design. There

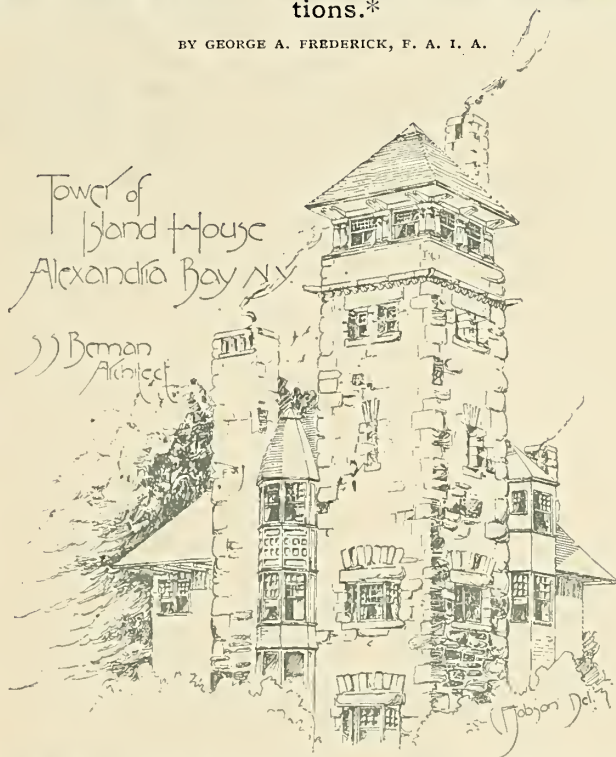
should be nothing thin, trifling or playful about it; it should be simple, massive and dignified; if possible, it should possess the quality of dwarfing everything that approaches it, as does the Arc de Triumph of Paris.

Now to recapitulate: Our building should be modern, not antique, though it should never look the results that the experience of the ages have taught us. It should be massive, powerful, leonine. It should show the most careful refinement of the simplest as well as the most ornate forms. The skill and perfection of its workmanship should challenge attention everywhere, as well as the care and conscientiousness of its execution.

I will here once again reiterate it, for I have “nailed it to the mast.” “Let us try and melt together the quiet serenity of the Greek with the heaven-aspiring tendency of the Gothic. Let our work be as agreeable in its proportions and as harmonious as the Greek, as vigorous as the English, as graceful as the French, as refined as the Florentine, and as systematic as the German.”

The Dining Room—Its Adornment and Decorations.*

BY GEORGE A. FREDERICK, F. A. I. A.



OF all the rooms that go to make up a house, be the same large or small, elaborate or simple, none exceeds in importance that chosen as the theme for this paper. It comprehends the fascination of early youth, the solicitude of years mature, the shrine of domestic enjoyment, and forms the very altar of social intercourse and hospitality.

Mindful of the caution regarding lengthy papers of the committee in charge of the preparations for this convention, I have epitomized this skeleton from a more voluminous essay upon the subject chosen, and shall herein confine myself to the more salient points.

Premising my remarks with the explanation that I propose in this essay to treat, not of banquet halls, or specially constructed rooms designed to accommodate large numbers, but of the ordinary, every-day family dining room, I shall forthwith proceed to the consideration of the subject, under a few of its most important heads.

The first thing of moment to realize in the selection or construction of the dining room is the purpose it is destined to fill, that the dining table must form and be the dominant center, and that all else in the room must be subservient to it. The center being thus established, upon what must the designer, be he who he may, depend for the effect he proposes to produce? The essentials for this are light and color; these and their accessories I will treat in the order given, and as briefly as possible.

The most important is the light. Of this there are two kinds, natural and artificial; the former we must take, either as we find or as we can control it; the latter is always at our disposal at pleasure.

Regarding the daylight, the exposure of the dining room should, when possible, be on the side avoiding the direct sunlight, especially during the months of summer, and, if feasible, should come from only one direction, that is, from windows placed only on one side of the room; and if it can be done, from a single source or opening, made sufficiently large and proportionate to the room, either as a single, double, or even triple window, to suit the circumstances. The preferences for this light should be given to the narrow side of the room. If light from two sides cannot be avoided, let the openings be placed opposite to each other (on the narrow sides) in preference to two successive sides, but never permit the light to come from more than two sides. It is needless to add that the provision for light should be abundant.

Artificial light, as before remarked, is under our direct control. It may come from a chandelier suspended from the ceiling, or a candelabrum placed upon the table. Be the illuminating power gas, candles or oil, is of no importance, so it be amply sufficient. No other light should be permitted unless actually required for the side table, by reason of its being too far removed, and then only sufficient for its purposes. The former, as

*Paper read before the Twenty-first Annual Convention of the American Institute of Architects at Chicago, October 20, 1887.

principal light, must be placed either over or on the center of the table, sufficiently elevated not to hinder the range of vision, nor yet so high as to cast unpleasant shadows on the faces of the guests. For the side table, the fixtures, if any, should be as simple and unobtrusive as possible.

If thus compelled to banish the light from the sides, and to concentrate it in the center, it follows naturally that it is not desirable for the walls and their decorations to come into undue prominence; they are nothing in themselves, and exist only to form a background for the picture we desire to produce.

If this be true, then the color chosen for the walls should not be violent, or even a light tone of color, as the center would then fail to relieve itself from such a background; neither should the color chosen be so dark, or of such character as to produce a gloomy effect. It is not my purpose to suggest any specific color or tone; the object desired can be gained in various ways, and must be left to the fancy of the designer or the taste of his employer. I will only remark here that warm tints are preferable to cold. Sometimes it may occur that some objects which cannot be changed are already on hand for the furnishing of the room, such as rugs, carpets, curtains or special pieces of furniture, in harmony with which the color of the walls must be made to conform.

As a general rule, blue should be avoided; warm, reddish tints, of a somber but rich and tolerably dark tone, can safely be recommended, they form a happy medium between light and dark, will not lose their identity in the deepest shadows, and cast warm reflections; neither will red reflect the light, but, on the contrary, by its absorbing tendency, give that repose to the walls which is so very desirable; it also forms an excellent background for pictures, silver or other metals, or glassware.

For the joinery of the dining room, hardwood, naturally finished, is always to be preferred, and used wherever possible; the natural colors of the wood, treated as above suggested, will generally harmonize well with the walls. A dark walnut should be avoided, it is too heavy, and in shadows loses all color. Oak must always remain a favorite for the dining room.

All dining rooms should be wainscoted; simple panel work will suffice, but it should always be panel work. A suitable finish for this room is to construct, also, the ceiling of wood, either with beams properly proportioned, or paneled and molded in pleasing form, but not too heavy. The wainscot need not cover the entire walls of the room, it is better to leave a fair proportion of the wall space either for pictures or plain wall surface. Where the ceilings are lofty, a good finish is secured by making the wainscot fair in height with the doors. If wainscot cannot be afforded, a simple molded wainscot cap, or chair-rail, as often called, will do as an economic substitute, the space between it and the baseboards being finished in a darker shade than above, and can be ornamented with some pleasing diaper in low relief plastic.

The mantel in the dining room (assuming that no dining room is complete without a fireplace) should always be of hardwood, capacious, large to the full proportion the room will admit, and constitute a feature in its design and finish. An open fireplace of good dimensions, and a generous wood fire in season, are to be recommended. Additional provision for properly heating the room will be required in many localities.

The reasons which dictate a quiet background also suggest the procedure, if more than one tint is required. This gives at once two subjects for consideration: color and the form of decoration. Harmony is demanded, but as this may spring from varying elements the question is whether all are equally good. We may accept three principles: harmony of shades, of contrast, of combination. The first depends on one color, but two or more shades; the second upon two colors, the combination of complementaries; the third upon more than two colors, and may embrace the entire scale. While harmony may be secured by any of these means, the effect, as regards force or repose, is far from being the same; as the last quality is the one desired, it follows that the above methods cannot all be equally good. Harmony of contrast is best where strong effects are sought, which is not our case. The combination of several colors is the less proper the closer they approach the action of strong contrasts. Should several colors be chosen for this purpose, they must blend softly without marked predominance, all must combine in producing the tone of unity.

Neither of the above principles are suitable when additional decorations for the walls, such as pictures, plaques, vases, or other ornaments are intended to be displayed upon their surface. Pictures, as is well known, require not only a quiet wall, but almost one of a specific color; and for this reason I would suggest, if not content with a wall of a single color, the employment of the harmony of shades in such form that the tints employed should vary but little, and as far as possible blend into a single tone, so that objects placed against the same may remain distinct. Of equal importance with the choice of color, if our object be repose, is the design of the ornament to be placed upon the same; through the character of its design, an uneasy or violent effect of color cannot only be intensified, but even in itself, on graduated tints, it can produce unrest in the entire space. The design employed should consist of strong, direct, and regular forms; we will always find that small leaved, realistic treated motifs, even when they consist of but shade on shade, call forth an uneasy glitter. While more or less this may not be the case with large leaved models, they, apart from realistic objections, give to their constituent color too large a field or body, producing an effect out of proportion to the place. Should such walls be intended to accommodate pictures, ornaments, or polished utensils, the result will be confusion. A strong and decided pattern, recurring at regular intervals, is an indispensable condition for the walls of the dining room if this form of decoration is decided upon.

While not intending to go further into this subject, I cannot leave it without a few words regarding picture ornamentation, that is, such as are sometimes drawn on, and form a fixed part of the decoration. It might appear as if the theory of a quiet background, and opposition to anything claiming special attention, would entirely exclude such. Instead of absolutely prohibiting, I will grant a partial admittance, but not a supreme assertion: they may form a minor part, submitting to the law the space dictates, and brought into full accord with the place. If employed, they

should be kept in a certain sense ornamental in character, so as to be readily recognized as a decoration, and never used to deceive or create illusions.

Two things must be observed: the choice of subjects, and the adaptability of the space. In the connection of subjects none can be deemed admissible which requires dramatic vigor or force; and above all things, the subject chosen must be in harmony with the purposes of the room. Among the most favorable, I would suggest the cycle of the months, with their inexhaustible motives, their natural sequence, the seasons, the entire field of nature, agriculture, the forest and chase, the sea and its fishes. All the pleasures and fêtes that cluster around and form the joys of domestic life. Whatever the idea elaborated, allegorical or domestic, it will remain the duty of the artist to make his representations cheerful and pleasing; cheerful as regards the object, the expression and color, pleasing in its composition and termination. From these walls sorrow and grief must be banished. If the host requires smiling faces and cheerful dispositions to grace his table, how much more his duty to banish all that could awaken feelings contrary.

The simplest examples of decoration are those found at Pompeii, on the framed walls of which, if I may use this term, with its single toned field, is contained a statuette, genius, bird, or small idyllic landscape. This style has considerable charm, does not destroy the background, but can only be employed where the wall is not broken with furniture, pictures, or other affixed ornaments. Where the latter are purposed, the painting had better be confined to a frieze girting the walls, and separated from the space beneath by an architrave of architectural form, either in hardwood or painted.

If the building be executed in any of the specific architectural styles, it follows that not only the dining room in its decorations, but also the walls and their paintings must be kept in proper harmony. It is also clear that designs or pictures employed in the ceiling must in their disposition and framing follow the same rules as dictated for the walls.

Entirely different is the case where hanging pictures are to be employed. Strictly speaking, in destroying harmony, they are unsuited to the dining room. Modern painting has chosen easel pictures for its pursuit, and demands the place in the house for which they have been designed; it follows that whoever, whether for decoration or his own enjoyment, has secured good pictures is satisfied, and little recks whether the object or subject is in opposition to the place, he hangs them up where he finds suitable space, sees them oftenest, and enjoys them most. They have become furniture, not a fixture tied to the room or its walls, and consequently free from its arbitrary requirements. Let us then accept and tolerate them with pleasure, merely suggesting, for their and our enjoyment's sake, that they be placed in the best position for observation, and not against vari-colored or otherwise unfit backgrounds. For this latter purpose, the warm, brownish reds already commended are excellent. Tea greens are also well suited.

The remarks regarding paintings are equally applicable to engravings, on condition they are good, otherwise not. A certain class of pictures, I think, are specially proper to the dining room, and whenever such are in existence they should receive proper consideration in the design and preparation of the room. I speak of family portraits, the pictures of our ancestors, not miniature, but life-sized heads, busts, or even full figures. This is the place where the family regularly meet, where it greets and welcomes its relatives as guests. What better spot then than this to make our venerated ancestors the silent witnesses of the enjoyment and prosperity of their successors; they are ours, a part of us, and of the place.

The dining room is also the proper sphere for the display of fine china, glass or metal ware intended for table use, be such plates, cups or bowls cut or decorated glass, jugs, flagons or cans. All belong to the place, and form an appropriate decoration to wall and mantel, table and sideboard. If it be intended to use objects like the above for wall decorations, then, such walls as previously suggested must be kept quiet in color, simple in design—one tone is best—thus will the metal and glassware, with its sheen or luster, add its charm to the place. That proper taste and care in the arrangement and grouping of the articles is required, it is needless to mention. The general suggestions made for the walls are equally appropriate, considering at all times their relative positions for the floor and the ceiling. The liberty of the walls cannot be extended to the floor, and, be its finish what it may, mosaic, tile, carpet or rug, the subjects embellishing the same should comprise neither animals, landscapes, domestic scenes, or historical efforts; all figures are out of place under foot. From my general remarks, it follows, that neither the floor nor ceiling should be permitted, in its design or coloring, to intrude itself sufficiently to fix the eye. The walls are the primary object of thought, and with these the balance must be brought into perfect harmony.

Regarding the furniture, a consideration which would naturally follow what I have said, I have but little time to discuss. From what has been expressed you will accept, without contradiction (as it is generally followed in practice), that the furniture for the dining room should not only be simpler, but also more massive than such as is used for the parlor or more pretentious rooms. Carving, excess of ornament and gilding are totally out of place; better to consult and secure quiet dignity, convenience and comfort, respecting its form and color, the choice of woods and its upholstery—these are all of the same importance, and should naturally be in unison with the balance of the room. Concerning the greater comparative simplicity required for the dining room, this, I think, is pretty generally recognized at the present time; but this very effort sometimes carries us too far, and, in consequence, the result too often flavors of a stenciled pattern. Comfort and ease must be prime factors in this room, where sociability and friendship are to reign and enjoy their triumphs. Let us then have more color and more furniture, in both be of the right type.

What further may be required, in addition to what I have said, and for much of which I am indebted to Jacob Falk, an able writer on this and kindred subjects, to make the dining room a success, is the table and its toothsome garniture; this I must leave to the genius and ability of the hospitable host and hostess, and to the efficacy of their cook, who, in all cases I fervently and devoutly hope may be a good one.



Architecture at the Present Time as Compared with that of Fifty Years Ago.*

BY W. W. BOYINGTON.

FIFTY years ago is an earlier period than my experience as an architect extends; it was, however, in the early years of my studies in architecture. In order to demonstrate fully the progress of architecture during the last half century, would it not be well to compare its progress with some of the other arts and sciences, for instance, steam and electricity, as they are closely allied to architecture in the complete construction of buildings? Steam was better understood fifty years ago in this country than architecture or electricity. Architecture was then understood and practiced as a separate profession by very few persons. I think it is safe to say that there are more architects in practice today in the city of Chicago than there were then in the whole United States. I think it is also safe to say that with the exception of the science of electricity, architecture has made greater strides than any other of the arts and sciences.

I claim that architecture combines both art and science to a greater degree than any other profession. Today, we can vie with any country in the world in style and permanency of construction. Fifty years ago this country knew no style in architecture, except the Classic and the Gothic, and but very few pure examples of either of those styles were executed in this country. The majority of buildings at that period were planned and built by master builders, who usually made their plans on the face of the trestle-board, and shaded them with white, red and blue chalk to designate wood, brick and stone. Details were made, full size, in the same way. My father was a master builder, and used to make his own plans, largely in the way mentioned. Architectural works in that early period were but few. Foreign works at that day were very expensive. I recollect the works of Benjamin Hill, La Fevre, and a few other authors, not to exceed half-a-dozen, altogether. At the present time we have a very large number of architectural publications, and upward of three thousand practicing architects. I trust a majority of them are doing a legitimate commission business, and are not mere tools of contractors.

Fifty years ago, and even less, architects were largely supported by contractors. Now, and for years passed, the owners have found it for their interest to deal directly with architects. Still, there are many impecunious persons who think that it is money wasted to employ an architect, so long as they can get the services of one through their contractor, when, by so doing, they do, as a usual thing, indirectly pay three prices for their plans. I think I am correct in saying that Philadelphia is the largest city in this country which can boast that it has most buildings built in the last fifty years, in proportion to its inhabitants, without the employment of architects. They used to build miles of street fronts, with builders to duplicate a certain mold, with but slight variations to suit localities or notions of proprietors. That system, I am glad to say, is largely done away with, even in Philadelphia, and architects' services are more fully appreciated. Still, in Philadelphia, there are today a less number of architects per capita than in any other large city.

When I came to Chicago, thirty-four years ago, I found the architects then in practice were recent master builders or contractors. Chicago and the West at that time could hardly be said to require the services of architects, separately as such. At that time the structures were but simple buildings, but the builders soon found that it would be better for them to have plans made, rather than to spend their time in making plans, so they clubbed together and induced one of them, the most apt in drawing plans, to give up contracting and to devote his whole time to architecture, and guaranteed him a compensation of \$2 per day, which should be paid to him if he did not get business enough to aggregate that amount. I have been told by a person, who was acquainted with the early workings of the first architect of this city, that he had an order for a set of plans for a dwelling, which he made and charged \$5 for them, and was much elated over the circumstance.

From this small beginning others started, and on my arrival I was introduced by friends, or had letters of introduction to citizens as a young architect from Massachusetts. This simply shows that as a profession it

was not understood. It is not so now. No profession is better or more favorably known.

Having mentioned the small compensation which architects* were obtaining for plans, and that it came largely from contractors, I might state that when I commenced business in Chicago I immediately instituted the custom of charging a percentage on the cost of buildings as the only proper course to pursue, and always collected it from the owners. This departure was rather up-hill work, but I have plenty of witnesses now to show that it was a success. And from that small beginning we can, today, boast of as fine and as capable a corps of architects as any city of the union, and the architect who first commenced practice in this city is still living. Chicago has been a sort of radiating point.

My sphere of practice has extended from the Gulf of Mexico on the south, to Manitoba on the north, and from the Atlantic to the Pacific, together with the intermediate cities on the lines from east to west and from north to south. How is it with other arts, sciences and professions? Have they kept equal pace? Railroads were but little known fifty years ago; the same with electricity. Steam power was well developed, but the mechanism was very crude as compared with the present. Electricity can hardly be said to have developed into any practical use half a century ago. Consequently, I think we must give way to the scientific development of electricity. I well remember some few simple electrical experiments made by stringing wires around a town hall, and, with a crude instrument and battery, a circuit was made around the hall and a few interesting experimental freaks were produced.

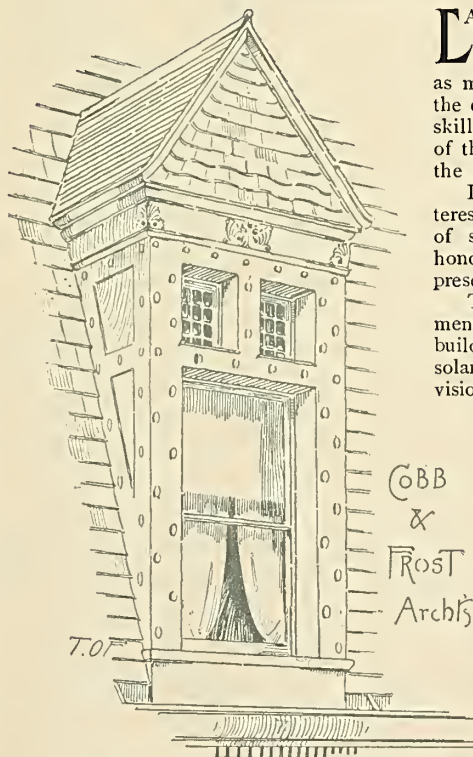
From this small beginning the world has been brought together within speaking communication, and a power produced, yet in its infancy, which is destined to be improved to the wonder and astonishment of the world. Hence, we must assign to it the place of the leading science of the past fifty years.

While we accord this we must not forget the very crude construction of railroads. First, the wood stringer with iron strap rails, more familiarly known as the "snake head" rail. On these rails the engines were constructed to run without tenders or covers of any kind to protect the engineers or firemen. They used to stand on the open platform, exposed to the severity of the weather and storms. It was in the year 1840, I think, that I was called upon by the master mechanic and general superintendent of the Boston and Albany railroad, to see if I could not devise some kind of protection, at least partially to cover the engineer and firemen, and have it sufficiently open not to obstruct their view. I examined an engine and reported that I could construct a cover. I was at once employed to make the necessary drawings and superintend the construction of the first cab over an engine in this or in any other country. The result was a perfect success, upon which there has not been any material improvement, as it was almost identical with the cab now in use. I need hardly inform you that its use was immediately adopted throughout this country. Had I had forethought enough to have secured a patent for the device, I probably would not have been called upon to prepare this paper.

I trust you will forgive me for diverging so far from the subject given me. The mention of these somewhat kindred subjects has been prompted by the incidents in my early life that were fastened so strongly in my mind in connection with my studies and practice in architecture.

The Requirements of a Large Library Building.*

BY J. L. SMITHMEYER, F.A.I.A.



LARGE library buildings are not the things of a day. They stand out as monuments of the taste, the culture, the architectural skill of the age—evidence of the advances of art and the progress of civilization.

In recognition of the interest that is felt in a subject of such importance, I am honored by your request to present my views.

The paramount requirements of a large library building are: Abundance of solar light, a generous provision of artificial light at night, plenty of pure air of a suitable temperature, well-designed protection against the ravages of fire, and against the deleterious influences of dampness, proper ventilation, convenient interior arrangement, durability of building materials, and stability of construction.

Other considerations play a most important part, namely:

1. The proper selection of a site, which should be high and dry, for next to a powder magazine, a book magazine requires the dryest soil and surroundings.

* Papers read before the Twenty-first Annual Convention of the American Institute of Architects, at Chicago, October 20, 1887.

2. There should be such distance between the library building and the nearest high structure as to render possible every necessary use of the direct rays of the sun.

3. The methods of ingress and egress should be limited in number, but very liberal in proportion.

4. The supply of water should be copious, well distributed through the building, and easy of access.

5. Ample provision for the expansion of the book-holding capacity of the building, in order that the demands for the enlargement of the building, owing to the growth of the library, may be postponed to the furthest possible time.

6. Proper provision of the best sanitary arrangements.

7. Easy approaches.

The evolving of a suitable design and style of architecture from these complex requirements—not something odd, bizarre, fantastic; but a style wearing the livery of good taste and exhibiting, even to unskilled eyes, its purpose—is not the most unimportant feature of the architect's labor.

It should be remembered that a design, however replete with artistic merit, may be utterly worthless where the elements of utility and stability are wanting; and per contra, the absence of art in the design for a monumental structure would call for condemnation. The useful and the artistic must combine to produce a harmonious whole.

It must be obvious from what has gone before, that the construction of a large library building, one abreast of the times, in keeping with every modern advance, and suited to the temper and spirit of our civilization, is a task of great moment and consideration.

Foreign models do not meet modern requirements, while our own country is too young to have made much progress in library architecture. The creative faculty must, therefore, be called upon in a more than ordinary degree.

In this connection the work of the architect is greatly increased by a want of unanimity among the librarians of both hemispheres.

The largest as well as the smallest library buildings of the Old World, public, private or special, and all the library buildings, of whatever character, of the New World are built in accordance with certain inflexible conditions, such as climate, locality, nature of soil, surroundings, capacity, nature of building materials, diverse notions of building committees or owners, cost of structure, etc.

This ought to indicate conclusively, that to accept any one plan, whether tested by trial and approved by experience, or still on probation, as an infallible model for imitation, under all circumstances would be a grave error; for there will hardly be found two library buildings making similar demands—each and every building having been erected and fitted up agreeably to certain peculiar, and oftentimes, heterogeneous conditions.

The scarcity of publications on library architecture is explained by the fact that with a few exceptions, "remodeling," refitting, enlarging and not "designing" or "evolving" was, and still is, the prevailing rule in regard to the larger public library buildings of the Old World.

We find, for instance, in the "Memoirs of Libraries" (Edwards), the mention of quite a number of projected library buildings, but of few that attained execution. The truth is, that most of the large library buildings of Europe sprang into existence, especially the older ones, not through any premeditated or concerted action, nor as a sequel to the thoughtful deliberations of state and county authorities as in this country, but under various and sometimes adverse circumstances, and in periods of time, differing widely each from the other, and altogether from this day and age of ours.

The largest library buildings of Europe for the most part, owed their origin to the munificence of princes or ecclesiastical dignitaries, who made donations of palaces and other large structures to subserve the interests of learning. Not having been originally intended for library purposes these buildings had to be adjusted to a new use, and from time to time, enlarged to meet the new order of things. These structures, as a consequence, cannot be expected to bear much resemblance to each other, either in point of interior or arrangement or external design—and yet, for that very reason much good can be arrived at by the study of the various novel devices and characteristics of these individual library structures and their application to our wants. In spite of their apparent incongruities, they can be rapidly classified into two general types.

The characteristic feature of the first type is the compartment, which performs a double duty. It is a receptacle for the books, and serves also as a reading room; while that of the second type involves the employment of a room separate from the compartment, which is devoted exclusively to reading purposes. The largest example of the first type is the library of St. Genevieve, in Paris; and of the second type, the National Library of Paris (the largest in the world) and the British Museum Library in London.

A brief consideration and comparison of the two types will show which possesses the greater merit, and consequently the strongest claims for emulation in a large library building.

Small libraries belong of necessity to the first type, namely: those of the clergy, lawyers, doctors, architects, or other professional or scientific men. These require their books at their elbow, being their implements of labor. Generally speaking, also municipal corporations belong to this type, and even libraries of the younger states. But there is a limit beyond which this becomes faulty and impracticable.

The hovel of the peasant and the palace of the prince are houses both, and both are well suited to their respective purposes and requirements. It is absurd to presume that the one, with every odor of poverty about him, would find comfort in the frescoed walls and tuseled trappings of the other; or per contra, that wealth could content itself with the squalor and dismal outlines of the peasant's unpretentious hovel.

But alter the condition of the peasant, make wealth his portion, and his habits will change apace. The hovel will be a thing of the past, save in memory, and in a new and fitting home, suited to his improved tastes and enlarged ideas, he will soon find every enjoyment that money can buy. In his former state all comforts were wanting. One room sufficed, or had to suffice, for every need. It served as cooking place, eating place, reading

place, sleeping place. If friends he had, this was his only reception room.

Not so with him, indeed, born to the purple, whose means secured for himself and friends every attractive surrounding, the drawing-room, the library, the art gallery, all the appointments of luxury and substantial comfort. To endeavor to force the habits of the one upon the other would obviously be ridiculous, and fail to produce satisfactory results.

Libraries grow as do nations and people. The laws of 1776 cannot be accommodated to our day. The garb of the boy cannot be fitted to the matured man.

Library structures, as a rule, should be built upon the progressive plan. But aside from our leaning toward separate reading rooms for libraries above a certain size and cost, there are serious reasons which turn the scales in favor of the second type.

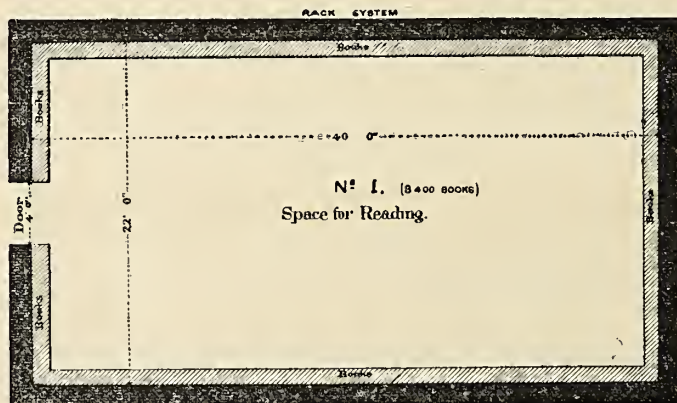
It is universally conceded that dust is the *bête-noire* of librarians, and, coupled with accumulated heat, the arch-destroyer of books. No proof is wanting for the statement that there must be a greater accumulation of dust in a room which is crowded with people than in one which is not so occupied. In dry weather dust is brought into the room from the streets; in wet weather, mud, which turns to dust after drying. This dust is ceaselessly stirred by the locomotion of readers and attendants, and by the daily sweeping of the floor and the cleansing of the tables and chairs, the result of which is that the greater part of it settles upon the books in the least disturbed part of the library, and unless the system of ventilation is downward, the dust will rise with the heat and destroy the books in the upper strata of the room. It is also known that much injury is done to books by rapid changes in the temperature, changes due to the temporarily crowded occupancy of the room in which the books are kept. Excess of humidity in the air is likewise detrimental to the books and bindings, which, in most cases, is produced by wet clothing, footgear, and the umbrellas which are carried into the rooms by visitors on rainy days. The odor of books and bindings at best is unpleasant and *not* healthful. Certainly they can be rendered more objectionable by these aggravating causes.

The second type is free from all these objections, and claims as its champions the majority of the larger and more modern libraries. It is a significant fact that the first type of libraries is being rapidly changed into the second type in the larger libraries of the Old World, because of the necessity to afford the constantly increasing number of readers better facilities for the use of the libraries. As long as these libraries were accessible to only a few of the privileged classes, who may have had a taste for reading or studying, there existed no separate reading rooms, nor were rooms heated, or lighted at night, but since the advent of constitutional government these libraries have been thrown open to the general public, and reading rooms have become an absolute necessity.

Some time ago there was a controversy among librarians. The subject was whether the "Alcove" or "Stack" system of placing the books was the better, and several of the leading librarians of the country took part.

Whether the individual racks upon which the books rest should be placed singly and flatly against the wall (which constitutes the rack system) or doubly, and at right angles to the wall and project a small space into the room, say 5 feet, and placed, say 8 feet apart (which constitutes the alcove system), or whether the racks should be placed close together, say 2½ feet apart, dividing the former alcoves into halves (which constitutes the semi-alcove system, between the alcove and the stack system), or finally, whether these racks are placed, say 2½ feet apart and extend across the room in parallel rows (which constitutes the stack system), is a matter of no concern to the architect, because whichever system for placing books is adopted must be acceptable to him, and he only wants time to make his arrangements to meet the preference demanded.

By way of illustrating, let us suggest a problem: A small library structure is to be put up to accommodate from 8,000 to 10,000 books, the interior arrangement to be so pliable that it will ultimately hold 26,000 books without enlarging or changing the building. We will take a building one-story high for our purpose, 22 by 40 feet in the clear, and 10 or 12 feet high, have a skylight and (if desired) side lights above the bookcases, which are only 7 feet high. Ten books per cubic foot will be a good average for such a library with an interior arrangement shown on Fig. 1.



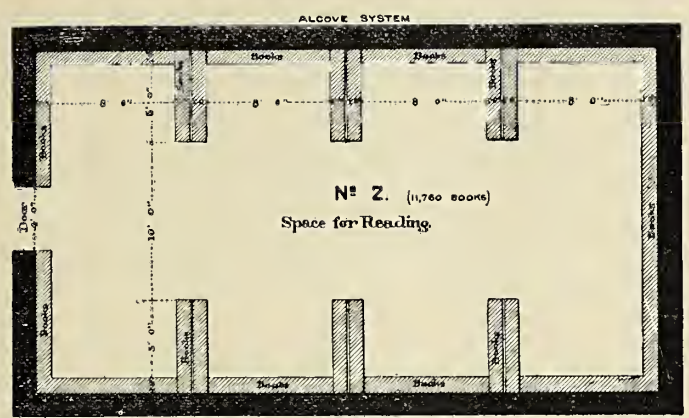
Deducting 4 feet for the door at one end of the room, as shown, we will have:

$$\begin{aligned} 18-22-40-40 &= 120 \text{ feet by 7 feet, height of rack.} \\ 120 \text{ by 7 feet} &= 840 \text{ feet.} \\ 840 \text{ feet by 10 books} &= 8,400 \text{ books.} \end{aligned}$$

Eight thousand four hundred books will be accommodated in single racks, put against the wall. The center of this room may be used for reading purposes. (First type.)

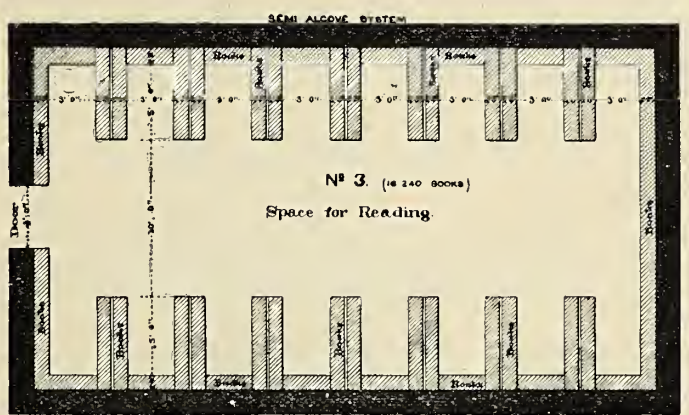
Should a greater capacity for books become necessary, 12 racks, say,

each 5 feet long and 7 feet high, might be placed in the room at right angles to the side walls, say, 8 feet apart (forming alcove). See Fig. 2.



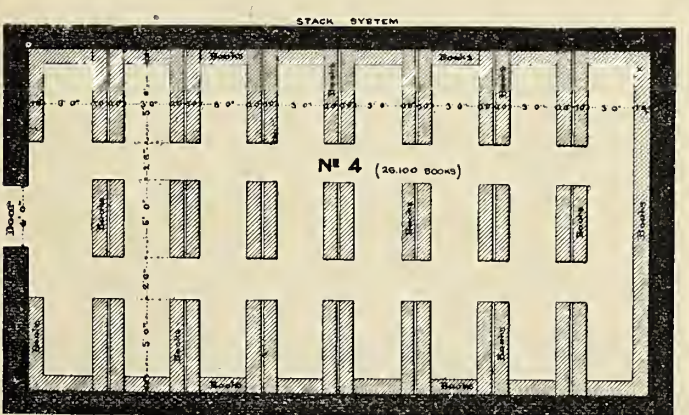
12 single racks by 5 feet long = 60 feet.
60 feet by 7 feet high = 420 feet.
420 feet by 10 books = 4,200 books.
Deduct 12 square feet of wall space covered by
racks 7 feet high at 10 books = 840 books.
3,360 books.

The center of this room may still be used as a reading room. (First type.)
The next extension will, if needed, consist in the introduction of 16 more racks placed between the alcoves and dividing them into halves. See Fig. 3.



By this addition is gained :
16 racks by 5 feet long = 80 feet.
80 by 7 feet = 560 feet.
560 feet by 10 books = 5,600 books.
Deduct 16 square feet of wall space covered by
rack 7 feet high at 10 books = 1,120 books.
4,480 books.

The center of this room may still be used as a reading room. (First type.)
The last extension possible will be in the direction of abandoning the compartment type and devoting the space now used for reading purposes to book racks. By this change will be gained 14 more racks or 9,800 books. These racks are placed in parallel lines the width of the room, say 3 feet apart, with passages between them, as shown on Fig. 4.



14 racks by 10 feet long = 140 feet.
140 feet by 7 feet = 980 feet.
980 feet by 10 books = 9,800 books.

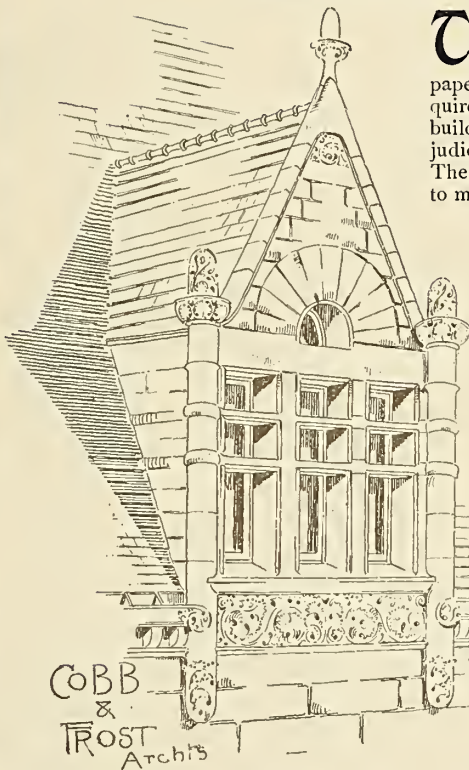
This will make a total of:

Fig. I	8,400
" II	3,360
" III	4,480
" IV	9,800
Total	26,040

It will be noticed that in the ratio as the space became more occupied by book-racks the library gradually changed its classification from the first to the second types, and with the introduction of the full stack system all possibility of using it for reading purposes has vanished.
This process might be called the "progressive plan," to which is similar, though on a larger scale, the one contemplated for the congressional library. In that library a capacity will now be provided for 2,500,000 books, which, as circumstances may require, can be extended to accommodate 8,750,000 volumes without enlarging the structure.
But with all the requirements paramount to all others are: *Plenty of light and air, security against fire and dampness, convenient interior arrangement, durability of material and stability of construction.*
The adoption of a style for the building, the part of the work which is generally regarded as a matter of pure art, namely, symmetry, the apparent form—this is quite a secondary consideration. Paramount requirements of an architectural problem must under no circumstances be subordinated to the adoption of a style; at the same time it must be borne in mind that it is the style, the apparent form, which is generally conceded to manifest the designer's taste, and that the encomium bestowed upon the architect's efforts, either by a contemporary public or by posterity, seems after all to be the crowning test of an edifice; therefore, the useful and the artistic must be agreeably blended.
In the time, which has necessarily been limited, it was not possible to give proper treatment to a subject of such interest. I have only been able to present the framework. Your indulgence must supply the rest. Let mine be the hope that in the endeavor to be brief I have not become obscure.

The National Building Question.*

BY MIFLIN E. BELL, F. A. I. A.



THE secretary of our Institute has selected as the subject of this paper the "Paramount requirement of a national building for custom house, judicial and postal purposes." The obligation was suggested to me, no doubt, because of my late incumbency of the office of supervising architect of the government at Washington, and because nearly four years of my life have been devoted wholly to the work of that office, which, at this time, has upward of eighty such buildings under its management and in course of construction. By referring to my subject in detail, I find that I am requested to treat of "Paramount requirements as regards site, construction, disposition of

space, arrangements of water supply, day and night illumination, ingress and exit, heating, ventilation, hygiene generally, and provision against conflagration, as well as any other points involved in this special theme which my studies and experience have led me to class as *important*."
I confess at the start that I hesitated long and seriously before accepting such an obligation, because I think when all the subjects mentioned are thoroughly digested, including those that I might class as important, there is very little left to discuss from the practical standpoint of our profession; and when the obligation is coupled with the request, oft repeated, that the paper shall be a short one, the obligation seems all the more difficult.
I have accepted it, however, not that I have hopes of presenting anything novel or entertaining to this convention, so many members of which are twice my own age in the practice of our profession, but with a most sincere desire that the subject of our national architecture shall be taken up at this time, treated of, agitated and talked over until our ideas are crystallized and put into practical shape, so that they can be understood and considered by an intelligent public, and their representatives in congress. The whole theme is so grand, so ennobling, so far-reaching in its results for the glory of our profession, that to be brief is well-nigh impossible.
* Paper read before the Twenty-first Annual Convention of the American Institute of Architects at Chicago, October 20, 1887.

The obligation includes a hasty treatment in detail of each subject suggested, and necessarily involves the consideration of the architectural department of our government at Washington. After the bill for the erection of a national building has become a law, the question of a proper site is the first consideration. The system by which the sites have been generally selected was for the secretary of the treasury to appoint a commission of not less than three nor more than seven gentlemen, residents of the city where the building is to be constructed, with instructions to recommend a suitable site, and, in most cases, the recommendation of these gentlemen has been approved. Theoretically, it is quite natural to suppose that the gentlemen so selected would perform their part with honor to themselves, and to the satisfaction of the department.

The facts do not bear out any such a supposition. The question of what the site was to cost, and its relation to the total amount of expenditure fixed for both site and building, rarely entered into the question with them, excepting perhaps to see that the price to be paid was not exorbitant. Such committees were nearly always swayed by personal interest, local influences, such as a newspaper, a brother member of the church, a warm personal friend, a poor widow, or some other creature that was found to be the governing cause in the case. The sites so selected were frequently of insufficient area, at times largely in excess of what they should be as to cost, not properly located for the government business, nor for the accommodation of the public; examples of which are to be found all over the country. When the site selected was found to be too small, it was after the building had been constructed and the postmaster and other government officers attempted to transact business in their new quarters. To obtain *then* additional ground and enlarge the building was the only alternative, and after accomplished, was always expensive, and seldom satisfactory.

The system now in vogue is to advertise in local newspapers for a site for the new building, thus allowing anyone, who may so desire, to submit his or their proposal. A stated time is fixed when an agent of the department is sent to witness the opening, and to hear what may be classed as public opinion. Each site is then visited and inspected by the agent and its price and eligibility taken into account. Upon the written report of the agent to the supervising architect, and in turn, his recommendation to the secretary of the treasury, action is taken, and the question of site, so far as the treasury department is concerned, is settled.

All papers are then given to the attorney-general, and upon his certificate that the title is valid, the site is paid for. The paramount requirements are properly met by taking into account the area required for the present volume of business, and for future growth of population, and consequent enlargement of the building, which should always be well and carefully provided for. The site selected should be at the angle of a square, and with its main façades to the south and east, for proper light and the accommodation of the public. The area in all cases should be sufficient, so that an undivided space of not less than thirty feet can be maintained upon the two inner façades, as a proper protection against fire from adjacent property, and for a proper circulation of air and the admission of light. In considering the building proper, the question of the material entering into its composition will largely depend upon its geographical location.

It should always be a fireproof building in every sense of the term, and so planned that additions can be added providing increased accommodations when necessary, while the architectural harmony of design is maintained or increased. The interior should be constructed of the most lasting and durable finish, such as polished domestic marble, encaustic tiles, terra-cotta and plate glass. Large openings in walls should occur wherever consistent with permanent and safe construction for a thorough diffusion of light. The floor and roof construction should be of iron or steel, fireproofed, and with fillings of terra-cotta. In the important question of roof construction, the best results have been obtained by the use of porous terra-cotta sheathing, set in lime mortar and bolted to T irons, the whole surface covered with coal tar or pure asphaltum, with roofing prepared paper, rolled on while the tar or asphaltum is still hot. The paper will then adhere perfectly and prevent the passage of moisture, fine drift snow or rain.

After the paper is applied, the valleys, hip-rolls, gutters and flashings are formed in copper, when the whole is slated with $\frac{3}{16}$ thick slate, bolted to place with bolts having countersunk heads, and with nuts and washers. When so constructed it can be safely plastered upon the under side, will be durable, and will be found to assist very materially in the heating and ventilating of the building during the cold season, and in the end will be found to be the most economical. In this respect, however, I do not place myself in competition with those architects who employ the flat roof or no roof at all. To me, any detached building, where the climate is, as it is in every locality of our country, without a roof to be seen, is an architectural innovation. In the distribution of floor space, the basement will be generally occupied for storage purposes, heating, ventilating and lighting apparatus, elevator pumps and machinery. The first floor of the building should be sufficiently elevated, so that the basement can be well lighted without areas, making it available for practical use, and giving a more imposing exterior. It will be entirely taken up by the postoffice department with its main working room, postmaster's public and private office, the assistant postmaster's room, money order and registering department, mailing clerk's retiring room, with stairs, halls and elevators.

The second story will provide accommodations for the Internal Revenue Collector's offices, the United States Marshal's public and private office and quarters for the United States Coast Survey. The third story will be arranged to accommodate the United States District and Circuit Court, with private rooms for the judges, his clerks and library, the United States District Attorney's room, besides lawyers' consulting room, with witnesses' waiting room adjacent, jury room, halls, stairways and elevators. The heating of the building should be, in nearly all cases, a low pressure, indirect, mechanical steam heating and ventilating apparatus.

The boilers and all the radiators should be massed in the basement, and by means of a fan the atmosphere of the entire building should be placed in a plus condition, and the supply of fresh air, and the ventilation

regulated as required by the temperature upon the exterior. The supply should be distributed at the ceiling in all cases, while the ventilation is operating at the bottom of rooms and hallways.

The lighting of the building should be by the incandescent electric light, the entire plant to be the property of the government, and under the control of a competent engineer in charge of the heating apparatus and elevator machinery, provision should be made for rainwater supply by the construction of large cisterns outside of the building, into which all conductors should discharge.

The tank in the attic should be provided with pipe and connection hose on the different floors for use in case of fire. For other purposes the city water supply generally proves everything that is desired. What may be considered as the "paramount requirements" of the building in question then can be properly condensed into three prime factors: first, a sufficient sum of money; second, architectural knowledge to properly apply it; and lastly, legislative authority, such as is sometimes obtained by accident, seldom by intention.

With these three factors given, the solution of the problem would be an easy one, and would be understood as well for a national building as for any other. That they are not given factors in the problem is known to you all, and further treatment of my subject brings me at once to the consideration of the present system by which our national buildings have been, and are now being constructed. As to the question of money available to construct a building, it is a fact that as many bills are passed by congress and become laws, authorizing the construction of buildings, restricting and conditioning with great caution, the expenditure, and yet omitting to appropriate one dollar, as are passed where the total amount to be expended is appropriated and made available as it should be.

The great majority of bills that are passed, and by which the treasury department is governed, for public buildings, appropriates only a small percentage of the amount fixed in the bill, as the total limit of cost. It is evident, therefore, that the architectural department of the government cannot be called to account for the notorious delays and consequent additional expense in their construction. Having authorized the erection of a building, why should not the full amount required for its construction be appropriated, so that the work of construction may be carried on with dispatch, and upon sound business principles. That it is not so is a most unaccountable fact upon any other than political grounds. The lower house of congress being democratic and the senate republican, are trying to make a record for economy in appropriations, and while it is possible to pass bills for necessary building, the appropriation committees decline to appropriate the money, and, in my judgment, must assume the responsibility for everything resulting from a policy of inadequate and dribbling appropriations. In considering the second requirement, that of architectural intelligence, that of the supervising architect of the treasury should be without limit.

Under the present system this is certainly a "paramount necessity." He should be so endowed, that at will, should congress vote the erection of forty buildings at one time, as did the Forty-Seventh Congress, his ability will still be sufficient. With eighty new buildings in course of construction, he is expected to make no mistake, and to do all the architectural work with the same facilities that were once required for ten buildings. What may be classed as architectural, is but one portion of his work; he is necessarily an executive officer, and attends personally to a correspondence of upward of three thousand letters per month, besides hearing contested cases of contractors, holding counsel with congressmen, senators and other government officials. His immediate official superior, the Secretary of the Treasury, may require some education in the ethics of architectural details with which he is not familiar, and it is one of the duties of the Supervising Architect to be especially devoted to his case. If, as in my own experience, there should be a Folger, a Gresham, a McCullough, a Manning, and a Fairchild in the space of four years, his duties in this regard are not lessened. Concerning his professional brethren criticism has generally fallen upon him for the architectural taste or style which he employs.

It is generally admitted, that in a national building it is the crowning element in its relation to the public, posterity and history. How important, then, paramount indeed, that it should be consistent with the requirements of our people and their peculiar institutions. There should be, in my humble judgment, no hidebound fetters holding our national architecture to the rigid rules of the classics, but an absolute freedom and emancipation of design in which the governing spirit shall be that of utility, durability, truthfulness and harmony. I abhor a false window as I do any other kind of a lie. The national building, therefore, should in its every feature of design, be of a style consistent with our education and temperament as a people, and monuments in history to our highest art and culture. The time allotted to this paper is so limited that for further information upon this factor of national buildings, I am compelled to refer you to "The History, Organization and Function of the Office of Supervising Architect" of the government, published by the office in the year 1886, and obtainable there upon application.

As to the third condition, it is paramount that congress, in order to embrace in a bill for the construction of a national building the proper legislation, should have sufficient data and knowledge of each case, upon which to base an opinion. The facts are, that in the past congress has seldom sought such information. If the language of a bill and the limit of cost were as they should be, it was purely accidental, the general intention being to get the building started and correct everything at some future session. The unsatisfactory result of this part of the present system are known to you all. I might go much more into detail by way of illustration, but our country is full of object lessons, and time will not permit. I will close with but a few remarks as to a remedy.

Certainly nothing will be done toward correcting the present system until the architectural profession take the initiative and formulate something better, and the responsibility for its continuance rests solely upon them. Congress will be found willing to enact into law any bill which can be shown to be in the interest of a better architecture and a more eco-

nomical administration. The first step, therefore, is for the American Institute of Architects, together with the Western Association, to formulate and agree upon a measure which meets every phase of the case in detail, and which, when presented to congress, will be the basis upon which every architect and the public at large can intelligently demand its enactment into law.

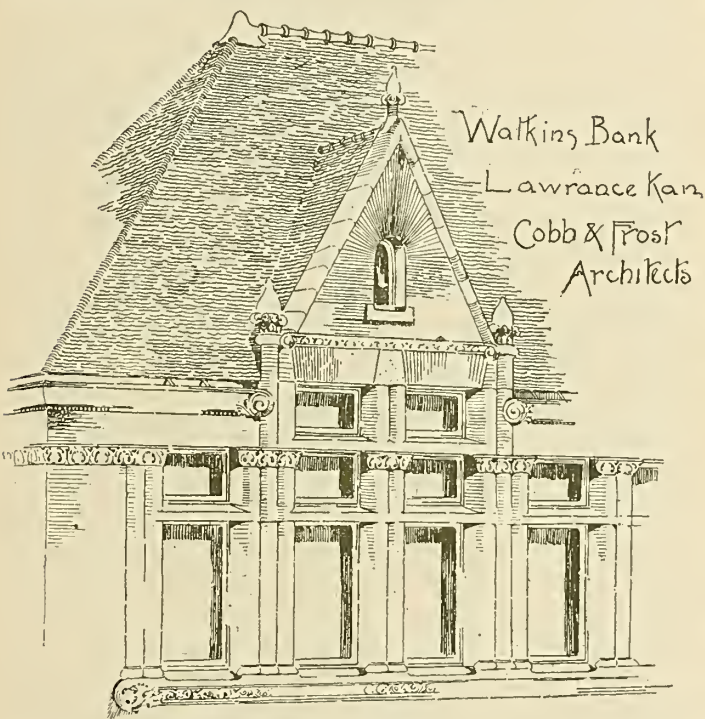
If we ourselves are incapable of this, complaint and fault-finding with the present system and its work will be useless. The objects to be attained are a higher art in the national building architecture, and a more effectual and economical administration in their construction. The public are much more interested in this matter than are the architects themselves, and ignorance of the subject is our enemy to fight.

Our architectural journals and the public press are the means by which to get the proper information to the people, and when there its effect will at once be felt in congress. Personally I have not hesitated to go on record in my reports to the Secretary of the Treasury as to what, in my opinion, should be done, and which, in general terms, is to create a commission or board of public buildings, composed of the supervising architect, an assistant supervising architect, a heating, ventilating and sanitary engineer, and a master builder, with the Secretary of the Treasury as *ex-officio* member.

We are happily reaching an age of specialties, and it is but reasonable that those who are experts in a special branch of work should be the safest and best guides to success. The combined intelligence of such a board will justly inspire confidence in the public mind, and congress as well, while our profession can safely trust the question of competitive plans to their judgment.

I am as much opposed to a promiscuous competition for a national building as I am to one for a private or any other public building, and what architect, who has obtained by ten or twenty years of laborious study, hard work and responsibility, a just reward in reputation, would care to risk it with those so-called architects who have nothing to lose and everything to gain. There should, therefore, be a standard adopted among architects, which shall determine effectually their claims to the title, upon the cornerstone of which should be inscribed indelibly the words honesty and ability.

Life is too short for further delay. Let the work already performed in this direction be weighed for what it is worth, but let not this convention adjourn until it has gone on record as to what it knows about the paramount requirements of a national building for custom house, judicial and postal purposes.



Twenty-first Annual Convention of the American Institute of Architects.

THE twenty-first annual convention of the American Institute of Architects convened at Chicago, October 19, 20 and 21. The sessions of the convention were held at the newly completed Art Institute in the handsome apartments of the Literary Club, kindly donated by the association for the purpose. The exhibit of drawings, to the inspection of which an evening was given, was made at the Exhibit of Building Materials.

The convention was called to order at eleven o'clock A.M., by First Vice-President Edward H. Kendall, of New York. Secretary A. J. Bloor, of New York, occupied the secretary's chair, these officers retaining these positions to the close of the convention.

The president made an opening address, elegant in diction, clear and practical in its advice and comment, which was received with applause by the sixty architects present. The address was as follows:

THE PRESIDENT'S ADDRESS.

Having known for only two or three weeks, that, owing to serious illness, our esteemed president, Mr. Walter, could not be with us today, I can do little more than call you to order, and formally endeavor to perform the duties of chairman.

I shall ask you, however, to undertake the business of this, our twenty-first annual convention, with that especial dignity of bearing and soberness of purpose, which would seem to be called for upon the attainment of our corporate majority, and will remind you that we are called together, in this great and prosperous city, for the purpose of exchanging our annual greetings, of renewing our allegiance, one to another, of giving evidence that we are competent to do the work required of us, of investigating the current developments in the science and art of our profession, and of increasing our usefulness to ourselves and to our clients in all possible ways.

We shall listen to papers from representative men upon subjects of especial interest, and reports of important committees must be heard and acted upon.

One of the greatest difficulties encountered by your Board of Trustees, now that our field is so much enlarged, is the frequent meagerness of information concerning candidates for membership, and, in order to reduce this difficulty to a minimum, must we not soon devise a better method than the present one of determining whether or not those who wish to join us are qualified by education, by business habits, and by personal characteristics so to influence public opinion that we may command the respect and confidence of the several communities in which we work?

Whether the present method can be made sufficient by a keener sense of responsibility on the part of those who know the applicants for fellowship, or associateship, or whether we should create an office, in the nature of a traveling secretaryship, the duties of which would be to come in personal contact with all our members and would-be members, and by intercourse and correspondence, to make the institute more surely a common ground where the best instincts and interests of our profession should center, is a subject which we ought soon carefully to consider.

We must all feel gratified by the growing interest taken in our institute which is clearly shown by the large number of applications for membership, and of requests for information as to the organization of additional chapters during the past year, and you will all bear me out when I say that we are especially glad to have admitted so many who are also members of the Western Association of Architects.

It is our wish to have the active coöperation of all the best men in the profession, and the being a member of other associations or societies, instead of being a bar against, is in fact the very best reason for joining the institute, as it would then get the benefit of doubly organized work, and the general welfare would be correspondingly advanced.

Then, again, we wish to see and personally know all those who are doing good work in this great country, and the day will soon come when these annual meetings will be eagerly looked forward to, and be largely attended, and when they will be considered not so much from the standpoint of duty as from that of pleasure and privilege; then, also, will the American Institute of Architects accomplish its highest degree of usefulness when it becomes the chief vehicle of professional pleasures as well as of professional duties; and when, to the formal requirements of routine and committee, are generously added the fraternal leaven of impulse and comity.

Mr. Kendall's address was referred to a special committee to report back to the association. Secretary Bloor submitted the report of the Board of Trustees, which was also referred to a special committee, as was that of Treasurer O. P. Hatfield. Professor N. Clifford Ricker, chairman of the Committee on Education, made a lengthy report, in which he outlined much that could be done toward the architectural education of young men, and described in detail the course of study in this respect at the University of Illinois at Champaign. This report was also referred to a special committee.

The following members of the Institute were present during the sessions of the convention:

Albany, N. Y.: Robert W. Gibson.
 Baltimore, Md.: George A. Frederick.
 Bridgeport, Conn.: Warren R. Briggs.
 Buffalo, N. Y.: William S. Wickes.
 Champaign, Ill.: Prof. N. Clifford Ricker.
 Cedar Rapids, Iowa: Eugene H. Taylor.
 Chicago, Ill.: D. H. Burnham, Henry W. Hill, Alfred T. Pashley, S. S. Beman, C. A. Frost, Normand S. Patton, John W. Root, L. D. Cleveland, H. L. Gay, Louis H. Sullivan, Mifflin E. Bell, W. W. Clay, S. V. Shipman, Wm. Holabird, J. J. Flanders, J. L. Silsbee, W. L. B. Jenney, W. A. Otis, Dankmar Adler, John Addison, August Fiedler, Alfred Smith, James R. Willett, P. B. Wight, F. L. Charnley, H. I. Cobb.
 Cincinnati, Ohio: James W. McLaughlin, W. R. Brown, William Martin Aiken, George W. Rapp, Charles Crapsey.
 Cleveland, Ohio: Levi T. Scofield.
 Dayton, Ohio: S. R. Burns.
 Elmira, N. Y.: Otis Dockstader.
 Hartford, Conn.: Melvin P. Hapgood.
 Lafayette, Ind.: James F. Alexander.
 Louisville, Ky.: C. A. Curtin, Mason Maury, C. J. Clarke.
 Nashville, Tenn.: William C. Smith.
 New York: Edward H. Kendall, A. J. Bloor, O. P. Hatfield.
 Philadelphia, Pa.: John Ord, W. B. Powell, John J. Deery.
 Pittsburgh, Pa.: C. M. Bartberger.
 Providence, R. I.: Edward I. Nickerson.
 Rochester, N. Y.: James G. Cutler.
 Scranton, Pa.: E. L. Walter.
 St. Paul, Minn.: C. A. Wallingford.
 Utica, N. Y.: Fred H. Gough.
 Washington, D. C.: John Moser, Adolph Cluss.

Among the visitors were: C. H. Brodie, London, England; C. H. Meyer, editor *Engineering and Building Record*, New York; R. C. McLean, editor *INLAND ARCHITECT*, Chicago.

REPORT OF THE COMMITTEE ON PUBLICATIONS.

The Committee on Publications reported there had been of the twentieth annual meeting of the Institute, 750 copies for distribution among the members of the Institute and corresponding members of the society, printed,

which had and would be distributed as soon as the present addresses were obtained. The report was accepted.

REPORT OF CHAPTERS A. I. A.

The secretary of the Baltimore Chapter reported the attendance of the meetings during the past year generally well attended, that there was neither any loss nor gain of membership; that there was a movement on foot by the architects and contractors to secure a building law for the city, with a prospect of securing its passage.

The secretary of the Boston Chapter reported that during the past year the monthly dinners and meetings have been well attended. At various meetings there have been the following events: C. H. Blackall reported on his two years' travel in Europe, and exhibited sketches made by him during that time; Geo. Sewell illustrated Moorish architecture, and a paper on the proper use of colors was read. Students of architecture were invited to attend the meetings of the chapter. A committee was appointed to report on the present condition and course of the Architectural Department of Massachusetts. By-laws had been revised, and a copy of the revised by-laws submitted and made a part of the report. That there were but few changes of membership during the year, one fellow, E. C. Curtis, had died, and one member was received. Five members had been advanced to fellowship, four juniors had been advanced, and three honorary members elected, making twelve in all.

The secretary of the Chicago Chapter reported its membership for 1887 to be twenty-seven, the same as stated in the last report to the annual meeting. There have been several special meetings during the year. At a special meeting held in August a committee was appointed to act in conjunction with a committee from the Illinois State Association of Architects to prepare a programme of reception for the American Institute of Architects.

The secretary of the Cincinnati Chapter reported there was merely nominal meetings of the chapter during the past year, but one meeting was held, and that for the election of officers in order to keep up the organization. It was believed that some way would be found to interest the members of the profession, as there was a disposition to keep up the organization. In regard to the status of architecture it was reported there were several important buildings under contract at the present time. The Chamber of Commerce and City Hall, to cost about \$700,000. Accompanying the report was a roster of the officers of the chapter.

The secretary of the Indianapolis Chapter reported satisfaction in respect to the regular meetings, the attendance being a fair average of the membership. Rules and resolutions have been adopted tending to the welfare of the profession and inviting all worthy architects in the state to join. The discovery of natural gas has drawn capital to the state, consequently the members of the chapter have been kept busy to the present time. Among the important buildings referred to were the State Capitol and the City Hall which deserve special attention. These buildings are models of their kind and were designed by J. Bolan & Son. Reference was made to the State Soldiers' and Sailors' Monument, to be built at Indianapolis, at a cost of \$275,000, as appropriated by the last legislature.

The secretary of the New York Chapter reported that a committee of the chapter had been appointed to coöperate with the board of examiners of the New York Fire Department for the purpose of having the board unite with the committee in suggesting and preparing a bill to present to the next state legislature to revise the building law. The chairmanship of the joint committee was given to the chapter. A letter by a New York capitalist requesting the chapter to give its influence for the repeal of the law regulating the height of buildings was laid on the table. A series of resolutions on the death of one of the members comprised a part of the report. The membership remains the same as at the last report, one member having died and one having been elected on the same day.

The secretary of the Philadelphia Chapter in his report alleges a marked improvement in that city in the style of architecture in the last two years, and especially in the last year, for which the members of the chapter claim the credit. Many new designs have been originated and a great demand has arisen for architectural skill. The erection of small buildings has been a feature, many thousand of small homes having been erected. The chapter meetings are held regularly.

The secretary of the Rhode Island Chapter reported the monthly meetings held regularly. After supper some subject is named and discussed, and sketches and plans shown.

The secretary of the Washington Chapter reported that on May 28, 1887, a message was sent to each architect residing in Washington city, requesting them to join the organization. On June 9 a list of all the architects was made and a personal request sent to them to join. A committee was appointed to draft a constitution and by-laws, which were reported and discussed at several meetings. The architects on the list meeting, August 11, the chapter was organized, the officers elected, and the secretary was instructed to call the first regular meeting October 9, when the report of the committee was discussed *pro* and *con*, and was finally referred to a special committee to report to the chapter at some future time. The officers elected, August 11, were reelected.

The reports from chapters were received and referred to a special committee.

REPORT OF THE SECRETARY FOR FOREIGN CORRESPONDENCE.

W. L. B. Jenney, the secretary for foreign correspondence, stated he had a very vague report to make; that during the past twelve months he had had nothing referred to him for his official action—not even some lucky fellow who was about to start off on his European tour had come to him for a good send-off. So he trusted the members would appoint some younger and more energetic man, and perhaps there would be a change. His first year's labor consisted in acknowledging the receipt of a New Year's card; his second in transmitting resolutions of condolence and in introducing an associate to his European contemporaries, and during the past year—nothing, so he was in hopes some more successful secretary of

foreign correspondence may succeed him at the close of his third term, the end of this month. Report received and filed.

The secretary announced the next business in order was the appointing of a committee for the election of officers and standing committees for the ensuing year.

There being no objections the chair appointed the following gentlemen: Edward I. Nickerson, of Providence, Rhode Island; H. L. Gay, of Chicago; J. C. Smith, of Nashville.

On suggestion, the chair added to this committee, W. R. Briggs, the additional member.

The special committee appointed on the bill to provide improved methods in the architectural service of the federal government in conjunction with a special committee of the Western Association of Architects, reported that the bill had been introduced before congress, but had not been reached in the order of business. The cause of the delay was accounted for by Representative Hewitt of New York, who introduced it before congress, in a letter dated June 28 to the chairman of the committee, in which he stated he had been unable, through press of business, to give it proper attention; that the bill would have no success until it was placed in the charge of someone who would take special interest in it. When one reflects that there are ten thousand bills before congress, one will understand how difficult it is to get consideration of a bill unless some member devotes all his time to it. Mr. Hewitt suggested the reference of the bill to the Committee on Public Grounds, etc. The committee therefore reported in favor of continuing the effort by the Association, and providing for its proper introduction before the next congress.

The Committee on Architects' Protective Associations reported a letter from T. M. Clark, under date of October 4, in which he stated it would be utterly impossible for him to attend the convention or do anything about the inquiring into the personal laws of the different states; that it would take weeks to look the matter up and to arrange the time to get some work done on it. The thing has been out of the question. On motion this letter was accepted as the report of the committee.

The committee to whom was referred the subject of a permanent home for the Institute reported that in their opinion this permanent home should be located in New York City, somewhat centrally yet not in the most expensive district, that it should be a fireproof building, and constructed for office purposes for public use as well as for institute purposes—that it should be built as a building investment; in other words, as a joint stock enterprise with a capital stock of from \$300,000 to \$500,000, to which the members could subscribe according to their inclination—that such a building would readily rent, one-half of which rental could be held as a reserve fund. The committee would not suggest details. The report was accepted.

The Committee on Building Contracts for use throughout the United States reported that in their conference with the Special Committee of the National Association of Builders of the United States, it was decided to recommend that a committee of three be appointed from this Institute, the Western Association of Architects and the National Association of Builders to prepare such contracts, with power. The report was received and accepted.

The president was empowered to appoint said committee and named Messrs. Mifflin E. Bell, Levi T. Scofield and Dankmar Adler.

On motion of the secretary, the chair appointed as the auditing committee, Messrs. D. H. Burnham, W. R. Briggs and Chas. Crapsey.

It being next in order the chair appointed Messrs. J. G. Cutler, J. W. McLaughlin and J. W. Root a special committee to report on the various reports submitted to the convention.

The secretary then read a letter of greeting to the institute from the Alabama State Association of Architects, in which reference was made to the progress made of late years in architecture, and claiming for that state a special progress. Credit was given to the American Institute of Architects for this progress. The letter closed with the following sentence: "We desire to place on record our satisfaction, and again offer you our collective and personal gratification." The letter was ordered accepted and placed on file.

The secretary read a letter from Mr. John Ord, reporting the condition of President Walker, who has been very ill, and stated he had received a telegram from Mr. Ord, in which he stated that he proposed calling on him Sunday, and would report his condition to the convention on Wednesday.

A request was read to the convention from the Northwestern Terra-Cotta Company, extending to the members an invitation to visit their works. The invitation was referred to a committee of Messrs. Jenney and Gay, who subsequently reported favorably, and set the time at the close of the session, and the members had partaken of their lunch.

The secretary reported that, owing to the mis-sending of a portion of the boxes intended for the art exhibit, to the Art Institute, that part of the day's programme would be deferred until the following day.

After suggestions to go on with the routine business of the institute in the evening, it was decided to visit the Inter-State Industrial Exhibition at the Exposition Building instead.

A member: I would like to inquire whether the reported list of fellows and associate members embrace all who have belonged to the institute, or does it only embrace those who are now members and have paid their dues?

The Secretary: There are two lists, one showing the present membership, and the other those who are and who have been members.

Mr. Jenney: I have counted the names and there are about two hundred and seventy fellows and associate members.

A member: Mr. President, I count seventy-seven fellows on the printed list, and I see by the by-laws the number is limited to seventy.

A member: Then the number of fellows designated by the law of the institute has been exceeded.

The President: That law has been changed, and there is now no limit placed to the number, provided there is no reasonable objection to the applicant and he has the indorsement of two fellows.

Mr. Adler: Then as it stands now, any architect who wishes to become a fellow may become one. It only requires for his advancement the names of two fellow members and a willingness to pay dues. The first may not be so difficult to obtain, and the only safeguard is that a man may be so obnoxious as to cause two members to write their names over their protest.

The secretary read section of the by-laws on the subject of memberships, and after some further discussion, in which the qualifications required to be advanced to the Fellowship degree was raised, and the proposition to advance all the present associate members to that degree, Mr. Jenney moved that a committee of three be appointed by the chair, to report at the next annual meeting an amended by-law bearing on the fellowship. The motion prevailed.

The president announced as next in order Mr. D. Adler's paper "The Paramount Requirements of a Large Opera House," printed on page 45, which was read by that gentleman.

This paper was received at its close with marked approbation, and on motion was referred to the Committee on Printing.

At the conclusion, the convention adjourned to visit the Northwestern Terra-Cotta Company's works after lunch, and the Inter-State Industrial Exposition in the evening.

SECOND DAY'S SESSION.

The convention was called to order by the chairman, Vice-President Kendall, at 11:30 A.M., and the chair calling for unfinished business as first in order, Secretary A. J. Bloor read several letters, among which was one from Napoleon Le Brun and one from George C. Mason.

The President: The proposed change in the by-laws is the next business before the convention.

The secretary then read the circular containing the proposed changes, which had been forwarded to the several members of the Institute, which are as follows:

ARTICLE I. SEC. 5. The name of any honorary member, resident in this country, who, after his election to that grade, shall engage in the active practice of his profession, shall not afterward be printed in the roll of honorary members during the continuance of said active practice.

ARTICLE V. Add to the end of the following sentence: No president of the institute shall be eligible for consecutive reelection to the national term more than once. A president above the age of seventy years, who has served two years, shall, if he so elect, be exempt from the payment of annual dues, and be enrolled as honorary member, with the additional title of Past President, and in any case shall continue to have all the privileges of the institute, including voting.

The amendments as read, were, on motion, adopted.

The President: We shall now hear from the Nominating Committee.

The committee submitted the following report:

For president, E. H. Kendall, of New York; secretary, H. O. Avery, of New York; treasurer, O. P. Hatfield, New York.

For board of trustees: A. J. Bloor, New York; H. M. Congdon, New York; Levi T. Scofield, Cleveland, Ohio; John W. Root, Chicago.

For board of education: N. Clifford Ricker, Champaign, Ill.; A. Stone, Providence, R. I.; W. R. Ware, New York; E. H. Taylor, Cedar Rapids, Iowa; Geo. C. Mason, Newport, R. I.

For secretary of foreign correspondence: Arthur Rotch, Boston, Mass.

The President: Gentlemen, I am surprised to find my name heading this list, I could not think of aspiring to the position. Not only that, I cannot possibly bring myself to serve you as president. I am not your man for president. I think Mr. Walter should remain your president. If he can no longer remain so, there is only one man in the country who should be president of the American Institute of Architects, as far as my feelings are concerned, and that man has not only a reputation in America with men of repute in the profession, but also in England, France, and Germany—Mr. Richard M. Hunt! I must very respectfully decline your nomination.

A member suggested that President Walter be continued in the office.

Mr. Deery: Mr. President, is it not a fact that Mr. Walter is now an honorary member of this institute, with the title of past president, and is not eligible to the office? Besides, he is too old to make long journeys, and is now very sick, and as I understand it, he has said he would not accept another reelection.

Mr. Briggs remarked that the Committee on Nominations had considered Mr. Walter's sickness and his statement that he could not accept the office of president beyond this term, and that it was out of no disrespect to him that his name was not offered.

Mr. Deery: I ask for a decision. Does not the amended by-laws place Mr. Walter in the position of being ineligible for president?

The President: I should say it would act in that manner as he was the president when these amendments were made.

J. G. Cutler: Mr. President, I move that a committee of three be appointed to draft suitable resolutions, expressive of the feelings the members of this institute have for the faithful service rendered by Mr. Walter during his long term of office as president, and expressive of the regret we all feel that he has positively declined to serve us longer in the office he has so long served with honor and distinction.

After a general discussion, in which the question of the eligibility of some of the nominees was raised on account of not being advanced to the fellowship, Mr. Adler moved to refer back the report to the committee, with definite instructions as to the non-eligibility of associate members and eligibility of fellows.

The President: The next business is the report of the committee appointed to examine the trustees' report.

The chairman of the committee made the following report:

M. E. Bell: Your committee to which was referred the report of the Board of Trustees for 1887 report: First. That the thanks of the institute are due to the members of the Executive Board for the thoroughness and ability manifested in this year's work in the report submitted by them. Second. That we recommend that the report be placed on file and printed with the records of the committee. Third. That the various recommendations and suggestions made by the Executive Board be taken up seriatim and acted on by this convention. Fourth. That the papers relating to the

reported case of non-professional conduct which are referred to in said report be made accessible to the members of the institute during this convention.

The President: The next business is the report of the Auditing Committee.

The committee made the following report:

D. H. Burnham: Your Auditing Committee having examined the treasurer's report and vouchers find the same correct.

The President: The report of the special committee on various reports is next in order. The following is that committee's report:

J. G. Cutler: We recommend that the address made by Mr. E. H. Kendall, and the report of Professor N. C. Ricker, be referred to the Committee on Publication. That a committee of three be appointed by the chair, who shall prepare a printed form to be used by the secretaries of the chapters for their annual reports; that the form be presented to the board of trustees for their approval at least two months before the next convention, and that the secretary of the association may forward this form to secretaries of each chapter. It is intended in this recommendation to secure for the convention information on such points as will be of interest to the Institute, but it is not intended to limit the reports of secretaries to the form alone, but to leave them free to furnish such supplementary information as in their judgment will be of interest. Your committee notices the absence of reports from two chapters, and recommends that the board of trustees inquire into the reason for this absence, and recommends that the secretaries of the chapters be instructed to forward their reports to the secretary of the Institute one month before the annual convention, and that a failure to report be inquired into by the board of trustees, to the end that reports from each chapter be received at each convention. We recommend that the Committee on Plan for a permanent home for the Institute be continued, and the number of the committee be increased to five. We recommend that the report of the Committee on Uniform Contracts be accepted, and that the report of the Committee on Architects' Protective Associations be accepted and the committee discharged; also that all protective work deemed desirable for the interest of the Institute be undertaken by the Institute within the limits of its present organization. We recommend that the report of the Committee on Improved Federal Works be accepted and that the committee be continued, with the addition of Mr. Bell, late supervising architect, to represent the district west of New York. We recommend the report of the Committee on Publication be accepted.

On motion, the reports of the committees were accepted, to be acted on separately hereafter.

The president announced next in order the reading of paper by M. E. Bell. (Printed on page 53.)

On motion, the paper was received with thanks and referred to the Committee on Printing.

The president announced a paper by W. W. Boyington. (Printed on page 51.)

On motion, the paper was received with thanks and referred to the Committee on Printing.

John Moser: Mr. Chairman, in connection with the paper just read by Mr. Boyington, I was strikingly reminded, in his reference to builders and contractors, of a circumstance which throws some light on the character of the old-time builders, especially of Philadelphia. In 1863 there was offered by the government a competition prize of \$3,000 for the best plan for the present navy and war department building, the largest building in Washington. There were eighty competitors, and the profession put its best foot forward, but John Crumps, a Philadelphia builder, who came from England a simple carpenter, carried off the prize. This shows the state of the profession in those days, and that some of those old builders had some knowledge of architecture.

C. H. Ham then read a paper on "Manual Training," which was received with great applause, accepted with thanks and referred to the Committee on Printing. (Printed on page 44.)

The Committee on Nominations reported their revised list of nominations:

For president, R. M. Hunt, New York City; for secretary, W. A. Potter, New York City; for treasurer, O. P. Hatfield, New York City.

For board of trustees: Napoleon Le Brun, New York City; Levi T. Scofield, Cleveland; H. M. Congdon, New York City; John W. Root, Chicago.

For board of education: Prof. N. Clifford Ricker, Champaign, Ill.; Alfred Stone, Providence, R. I.; W. R. Ware, New York City; H. Van Brunt, Kansas City, Mo.

For committee on publication: T. M. Clark, Boston; S. S. Beman, Chicago; Chas. Crapsey, Cincinnati; Geo. C. Mason, Providence, R. I.

For secretary of foreign correspondence: Arthur Rotch, Boston.

D. Adler: If these nominations are now satisfactory to the present board, I would move that the gentlemen nominated be elected to the positions for the ensuing year.

The President: The constitution requires that a ballot should be cast. The convention might designate some member to cast the ballot.

D. Adler moved that the chairman of the nominating committee, to cover the by-laws on elections, cast one ballot for each of the gentlemen named in the report of the committee, as the will of the convention in regard to the officers of the institute for the ensuing year. The motion prevailed, and the officers for the ensuing year declared elected according to the report of the committee on nominations.

The following supplementary report was submitted by the Nominating Committee:

E. J. Nickerson: Gentlemen, your committee appointed to nominate officers of the Institute for the ensuing term, find in the matter of the secretaryship the Institute will be forced to relinquish the services of the present incumbent who, for so many years has illustrated his membership and his office of secretary, by self-sacrifice and devotion to the public interest of the profession. This secretary has been Mr. A. J. Bloor, of New York City. There has been no moment in his long career when the

needs of the Institute have not been as near to him as would the private enterprise most dear to his heart. There has been no step in the advancement of the society which he has not sprung forward to take. There has been no hour so dark in its history as to cause him to falter. Whatever the Institute may be today, whatever it may be in the future, will, in a generous measure be due to the gratuitous efforts of this great public-spirited servant and advocate of his profession. Your committee find that it would not reflect credit on your honorable body to ask Mr. Bloor to further carry his burden which he has so faithfully borne. The demands upon the secretary's time have already become great. Its demands promise to increase, and without a liberal remuneration it will be impracticable for future secretaries to devote so much of their working time to the needs of the office, and we respectfully suggest that a salary be fixed by your honorable body that should henceforth attach to the office. Of the vantage ground we have gained we should not be forgetful to indorse the sentiments of those eminent members of this society who have expressed the hope that this Institute would have made to Mr. Bloor some solid and substantial expression of the debt the society surely owes him. If the office is to be paid in the future, then let the same worker that has been ours in the past receive a suitable reward; and it should not be understood that in the mere payment of money we can expect to balance the acts of our generous ex-secretary; money cannot accomplish such an end. Our heartfelt thanks must ever go out to him, and although we cannot demand his active services as secretary, we shall not the less still hope to bear upon his counsel and profit by his advice.

Secretary Bloor: Mr. President, I simply want to thank the committee for their kind remarks, and I will say I cannot give up my interest in the Institute, though I shall not be able to give it the time which I have. I will say further in regard to the circular letter from Mr. Hawley, I only knew of the existence of this document a short time ago when Mr. Hawley sent me a copy. Officially, I have no knowledge of the circular.

On the motion of Mr. Adler, the report was adopted, and ordered printed with the records of this convention.

On motion the convention adjourned to meet at eight o'clock in the evening at No. 15 Washington street, where the art exhibit of the convention was made.

EVENING SESSION.

The members of the Institute began to gather early to examine the large and unusually fine display of drawings and photographic work which had been made a special feature of this meeting. Owing to a lack of judgment, or want of comprehension in those having the hanging of the drawings in charge, the members were compelled to undergo a trying ordeal in their inspection, in which many of the advantages that might have been gained were lost. Instead of being hung on the walls properly, and in an orderly sequence, where the effects could have been studied, they were distributed over a wilderness of furnaces, steam pumps, and house building appliances, hung up against them where they could; leaned against, where they could not be hung, or chucked down in some obscure, out-of-the-way corner. (One of the finest drawings of the exhibit was exhumed by one of the members from a lot of bric-a-brac lying on the floor.) Had the drawings, sketches and photographic work been properly exhibited, then this evening might have been a very interesting and memorable one to the members, as the large and unexceptionally fine display of building appliances to be found there would have largely added to, rather than taken from the interest of the occasion. As it was, it reminded one of the patent medicine man's use of rocks for advertising purposes, only inversely, the drawings, sketches, etc., seemingly being placed to call attention to some special building appliance. The drawings consisted largely of line and water-color drawings. Without being invidiously inclined, where so much merit was apparent, probably the most interesting exhibit was a display of the originals of the set of monographs recently published by the *American Architect and Building News*.

After some two hours of examination and exchanging of views, the members were called to order, in the Illinois State Association of Architects' assembly room, to listen to a paper by John Moser, of Washington, D. C., on Federal Architecture, which was received with approbation and accepted with thanks. Mr. Moser, at the conclusion of his reading, illustrated his theory of construction by blackboard diagrams.

Mr. Hatfield called attention to the fact that Mr. Moser had a peculiar manner of illustrating his idea of line-drawing, and asked the president to request him to gratify the convention with an illustration.

The request being made, Mr. Moser stepped up to the blackboard and gave a very humorous illustrated blackboard talk—using, to carry out his idea, an outline of a man's coat, wherein the characteristics of the English, French and German nationalities were shown by the well-known and readily recognized cut of that particular garment; Mr. Moser claiming that as an individual characteristic was shown in his handwriting, the same lines expressed themselves in all he does—none the less so in architecture. The English characteristics were shown in the angular lines—the French in curved lines—the German in the combination of both.

The meeting, at the conclusion of Mr. Moser's "turn-coat" lecture, adjourned, to meet the following day, at 10:30 A.M., at the Art Institute.

THIRD DAY'S SESSION.

The chair called the meeting to order at 11 A.M.

The President: As Mr. Bloor, the secretary, has had to return to his hotel for some forgotten papers, in order that the business of the day may go on we will begin by calling for Mr. D. H. Burnham's paper.

Mr. Burnham then read his paper (see page 60), which was listened to with marked attention. At the conclusion he said:

Mr. Chairman, I have the honor of offering the following resolution, which the secretary will please read:

Resolved, That a committee of five members be appointed, of which the chairman of this convention shall be an *ex-officio* member, the other members to be selected by him, to act jointly with one of a similar number to be appointed by the Western Association of Architects at their next annual meeting, to report as to the best and speediest

methods of consolidating all the architectural societies of America into one organization, the report to be full regarding the form and constitution for local societies, and also regarding the form and constitution and permanent place of meeting for the national or representative body; that the Western Association of Architects be and are hereby invited to unite with us in this work, and to appoint a committee as above.

Mr. Burnham: I move the adoption of the resolution.

Secretary Bloor: I second the motion. I read the paper the first day I got here, and I consider it a very able one. I think a large number of the members will agree with me. I think there are some points in it, perhaps, with which we may not agree, but on the whole it is a very able paper. I would move that Mr. Burnham be appointed on the committee.

Mr. Burnham: I do not think it would be proper for me to be on the committee.

J. W. Root: I would like to move to amend this resolution for the joint committee by extending an invitation to the Architectural League of New York.

Mr. Burnham: That association is not a national association but a local one. It is the intention to have the work done by the national societies. It seems to me if you ask the League of New York you must also ask the Boston society and others. Those societies will afterward be asked to review the work, but the two societies named in the resolution are the only national ones I know of, and the work should be done by them.

Mr. Root: As I understand it, the Architectural League of New York is not a local organization, except as to the accident of location. It is my impression that its membership is not confined to New York—that its honors are extended to Chicago and elsewhere.

Mr. Burnham: Is not its name "Architectural League of New York?"

The President: As a member of the Architectural League of New York I would say that Mr. Root is correct in saying its members are not confined to New York. Its non-resident members are scattered all over the country.

Secretary Bloor: I was one of the members of the committee that framed the constitution and by-laws of the Architectural League of New York. Mr. Burnham is right and Mr. Root is right. Mr. Burnham is right in saying as a local organization it is confined to New York, and Mr. Root is right in saying its benefits extend outside of New York to those of the profession who have a disposition to accept them.

Mr. Burnham: I have no objection to the amendment except that other societies may feel they ought to be consulted.

D. Adler: It might be made to read in this way: The joint committee of this Association and the Western Association shall have power to have represented at their meeting such other societies as shall see fit to join in the movement.

Mr. Burnham: I believe if you ask all the societies to send representatives to that meeting it will defeat its purpose. There would be such a big representation of local societies as to break it down. It is not expected that the work of this committee will be conclusive, but simply to get up a general scheme to be submitted to each of the societies.

R. W. Gibson: I would like to ask whether there will be any informal request to the societies to attend, as they would be glad, many of them, to meet with the joint committee.

Mr. Adler: As the chairman of the Board of Directors of the Western Association, I will say this matter has been broached in our board, and I believe the entire membership is in favor of any report on consolidation, and I think they reflect the wishes of most of the members of the Western Association, and I think this resolution will be received with favor by the association, which meets at Cincinnati next month.

Mr. Root withdrew his amendment and the resolution was adopted.

The president announced the next order of business was the reading of a paper by Mr. J. C. Cady, of New York, on "Opera Houses." In the absence of Mr. Smith the paper was read by L. H. Sullivan. The paper elicited applause, and was, on motion, accepted and referred to Committee on Printing. (See page 46.)

The president announced a paper by Mr. J. L. Smithmeyer, of Washington, D. C., on "Library Buildings," which Mr. W. L. B. Jenney has kindly consented to read. This paper was also received with marked applause, and on motion accepted with thanks. (See page 51.)

The President: The next paper is from J. M. Wilson, of Philadelphia: Subject, "Where the Line of Demarkation between Engineering and Architectural Practice is to be Found," which was read by Mr. Sullivan. Received with applause, and on motion accepted and referred to Committee on Printing. (See page 43.)

The President: The next in order is a paper by G. A. Frederick, of Baltimore: Subject, "Dining Rooms." This paper elicited applause, and was, on motion, accepted and referred to Committee on Printing. (See page 49.)

At the conclusion of Mr. Frederick's paper, the chair announced the following committees:

On Resolution of Thanks to ex-President Thomas U. Walter: J. W. McLaughlin, Cincinnati; W. C. Smith, Nashville; J. G. Cutler, Rochester.

On Chapter of Reports in the Future: N. C. Ricker, Ill.; W. G. Preston, Boston; G. A. Frederick, Baltimore.

On Uniform Contracts: O. P. Hatfield, New York; A. Stone, Providence, R. I.; J. H. Windrim, Philadelphia.

On Compensation to ex-Secretary Bloor: H. H. Holly, New York; H. L. Gay, Chicago; J. Murdoch, Baltimore; A. Stone, Providence, R. I.; C. Crapsey, Cincinnati; J. B. Liggins, Indianapolis; H. Van Brunt, Buffalo; J. L. Smithmeyer, Washington, D. C.; T. P. Chandler, Philadelphia; A. Laver, San Francisco.

The reports of the various committees which were received *en masse* at the Thursday's session were taken up in detail. The first in order was the report of the Committee on Reports.

An endeavor was made to amend the recommendation of the committee in regard to the chapter reports, so as to make the time for sending in the reports to the secretary of the institute two weeks instead of two months. Some considerable discussion ensued, participated in by Messrs. Crapsey, Adler, Briggs and the secretary, when the convention decided to adopt the recommendation as reported.

Mr. Adler moved to authorize the committee appointed to act in conjunction with the Western Association of Architects in the matter of federal buildings to make such modifications in the draft of the bill as may seem most expedient to secure its passage. As a member of the Western Association I was one of this committee sent to Washington to endeavor to secure its passage, and I became assured it may be necessary to make some modification to make the bill more attractive.

Secretary Bloor said it was not necessary for the committee had been given that power.

D. H. Burnham could not see the value of a committee of this sort. He had the honor to belong to the committee of the Western Association last year. The committee proceeded to Washington, and all that was possible to be done was most assuredly attempted and the result was simply nothing. They were informed on all hands at both ends of the avenue, that we had absolutely no effect whatever to carry out such reforms as were asked for. It would require an organization comprised of a great many members from a great many cities whose influence could be brought directly to bear on the congressmen and senators. He did not see how this committee, formed as it is, could do more than what has been done. Before success could be obtained public sentiment must be formed. The public press would have to be enlisted. As one of the congressmen from this section had said common light had to be thrown on the question, and one way would be to go home and bombard our senators and members of congress with letters from our friends and friends' friends and through the press, and in this way create public sentiment. There is no sentiment about this, and where there is no sentiment congressmen are apt to put it off or will invariably refuse to act. It seemed to him, while there was no harm in such a committee whatever, it was absolutely valueless. He moved the committee be discharged.

Secretary Bloor said Mr. Burnham had received one kind of advice from a member of congress, and he had received another kind of advice from another—Mr. Hewitt.

Mr. Burnham offered to withdraw his motion if the secretary would read Mr. Hewitt's letter and it did not sustain him.

Secretary Bloor said Mr. Hewitt's letter was not the only advice he had received. Mr. Hewitt advised putting the bill in the hands of one member of congress, whose work it should be to carry it through. He had had advice from other quarters, the secretary of the treasury and the incumbent supervising architect, and he believed in the combination of the advice there was good. He moved the committee be continued, with the modification recommended by the Committee on Reports.

Mr. Adler thought it might be well to add, to instruct the committee in doing all in its power to use the newspapers in forming public opinion by enlightening the public on the wishes of the convention.

Mr. Burnham wished to add a word more. He did not want to see this measure run about with all over Washington until everybody became

disgusted with it. He thought little or nothing can be done more than had been done until some such organization as he had outlined in his paper existed, and have it select some person capable of explaining the bill take charge of it and see that he did his work. He did not mean by this a mere lobbyist, but that it will be necessary to have some one at Washington who will see the bill is brought up and forced to passage. Experience has shown this to be the case with many bills in which the people were interested that only became laws because some one of ability had seen the work was done—and that meant money. He would like to see the bill the next time it was attempted carried to a success, which it would not be until some one whose special work it was, was there to attend to it.

Mr. Adler called attention to the fact that this was not the first time a measure of public welfare, which afterward became a law, had met a like fate at first. It could not be called a defeat of the measure, the failure of the committee to be recognized. He believed in having this or some other committee go to Washington for the purpose of enlightening and influencing members of congress, and to keep it there until the measure is secured. If the committee was discharged as Mr. Burnham proposed, it would be an acknowledgment of a defeat of the purpose.

After some further discussion, the motion of Mr. Burnham to discharge the committee was put and the chair decided in the negative.

The committee was continued, and Mr. M. E. Bell, late supervising architect, added to it, and the committee empowered to add a fifth member.

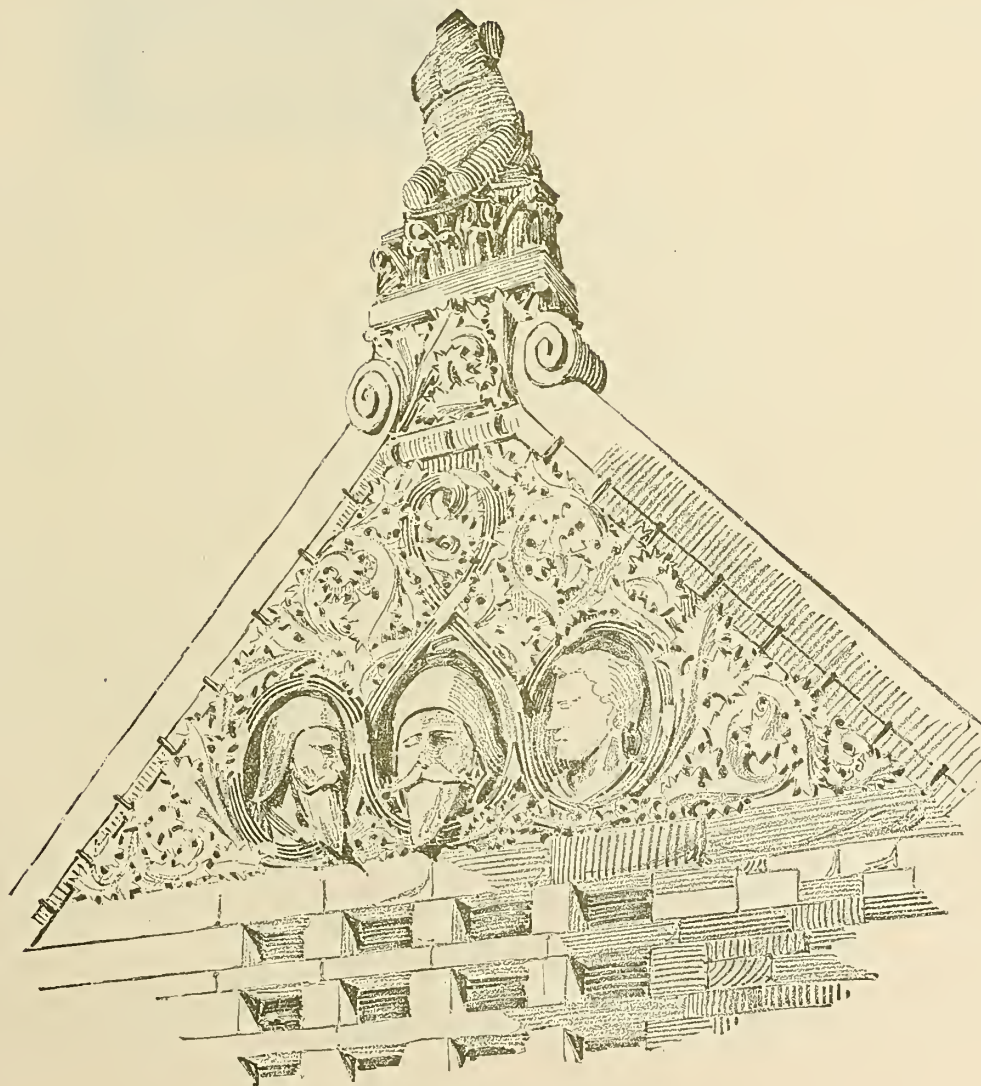
The secretary read a letter from the Committee on Metric System of the Western Association of Architects, advising the adoption of the system, which was referred to the Board of Trustees, with power.

Mr. W. C. Smith, of Nashville, moved that the subject of the complaint of non-professional conduct of one of the members, made by Mr. G. A. Frederick, of Baltimore, be taken up.

Mr. Burnham moved that the members of the press be requested to retire, which was carried.

After the discussion of the above subject, the convention proceeded to the closing business of the session, which was comprised in reading letters of congratulation, etc.; resolutions of thanks to Vice-President Kendall, the Chicago Literary Club, the contributors to the Art Exhibit of the meeting, members of the press, etc. The president then pronounced the convention adjourned.

On the second afternoon of the convention almost the entire assembly accepted the invitation of the proprietors of the North-Western Terra-Cotta Works, and were driven in carriages to the works, in the northwestern part of the city. Arriving there, the gentlemanly hosts, Messrs. True, Hottinger and Wagner, escorted the party through the vast floors devoted to the designing and manufacture of red buff and brown terra-cotta. In the modeling room the artists were hard at work upon the clay forms that were being molded from the architects' designs.



GABLE OF ART INSTITUTE, CHICAGO.

BURNHAM & ROOT, ARCHITECTS.

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Fuller particulars may be obtained by addressing said Auditor as below, or by consulting the detailed advertisements for said work.

The said Board reserve the right to reject any or all proposals submitted to them.

CHAUNCEY B. MATTOON,
Auditor Whitley County,
Columbia City, Indiana.

October 19, 1887.

SCHOOL HOUSES.

[At Albany, N. Y.]

STATE OF NEW YORK,
DEPARTMENT OF PUBLIC INSTRUCTION,
SUPERINTENDENT'S OFFICE,
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NOVEMBER, 1887.

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THIS number of the INLAND ARCHITECT has been delayed through a strike, inaugurated by the typographical union on November 1, which has not yet terminated, as far as the union is concerned, but is practically over, as the offices are fast filling up with competent men and we anticipate no further trouble. The pressmen's union examined into the causes of the strike and decided that the demands of the printers were unjust and refused to go out in their support. The pressmen's union is made up of intelligent, conservative men, who believe in the dignity of their trade and in justice and equity rather than in brute force. This is what the trade union of the future must be before it can work anything but injury, not only to its members, but to the cause of labor generally.

THOMAS USTIC WALTER, president of the American Institute of Architects almost since its organization, died at Philadelphia, October 30. In commenting upon this great loss to the profession on two continents, we cannot do better than quote from the *American Architect*, a journal originally established by the Institute, and its principal exponent since: "In the death of Dr. Thomas U. Walter, the late president of the American Institute of Architects, the profession in this country may be said to have lost the last tie which connected it with the traditions of the Classic revival, as well as a personal presence which had for sixty years steadily maintained the dignity of the calling which he practiced, and influenced for good not only his professional brethren, but the sentiment of the general public toward our art. Thomas U. Walter, LL.D., was born in Philadelphia, September 4, 1804. He chose architecture as his profession at a very early age, and was placed as a pupil with William Strickland, perhaps the most distinguished American architect of his time. It is hardly necessary to say that in those days the taste of architects was formed wholly upon Classical models, the study of English Gothic being allowed, we might say, only in a limited degree to those who wished to devote themselves to the designing of ecclesiastical buildings. Young Walter, who was naturally of a sensitive, orderly character, delighted in the elegance and purity of the antique, and studied it with such zeal and success as to make himself probably the best Classical architect who has ever lived in this country, and one of the best in any country at the time when his professional career was at its height. When he began practice on his own account, in 1830, the range of professional employment was far more limited than it is at present; and it was only upon the rare occasions of the construction of a public building, or a great private mansion, that the skill of a regularly trained architect was brought into requisition. His first important opportunity came, therefore, with his appointment as architect of the Philadelphia county prison, which was begun in 1831. Two years later he won the first place in the competition for the Girard College buildings, the most costly group of structures which had at that time ever been projected in the United States, with the exception of the Capitol at Washington, and devoted many years to the task of carrying out his noble design, which even now is scarcely approached in dignity and interest by anything that has since been erected in the country. His success in this commission gave him a widespread reputation, and in 1851 he was appointed architect of the Capitol extension at Washington.

"IN this capacity he accomplished the very difficult task of converting the insignificant Capitol already existing into one of the most beautiful and imposing structures in the world. * * * * * The boldness with which this great work was designed and carried out shows, to the professional observer, the consummate skill of the architect, and his confidence in his own resources. Finding the old Capitol constructed of decaying sandstone, he had it painted white, and constructed the vast wings, which form the extension, of white marble, selected from a quarry which furnished a stone not only of extraordinary hardness and durability, but disposed to take on with age a delicious pearly color, which, as it shows itself at present in the long colonnades, gives them an effect of supernatural purity and beauty. The dome, which completed Mr. Walter's additions to the building, although of iron, is inferior to none in outline and proportion, and consorts better than any other that we know of with the mass of building which it crowns. Much as we talk today, and with reason, about our progress in architecture, we have nothing to show more nobly simple and well studied than this great work, and it is no slight honor to the American aptitude for the greatest of arts that one of the first of the important public buildings of the country should, by the nearly unanimous opinion of critics, be still unsurpassed by any structure of its class in the world. Besides the Capitol extension, Mr. Walter, while in Washington, designed and executed the new front of the treasury department, the eastern and western wings of the patent office, and the extension of the postoffice, besides the government hospital for the insane.

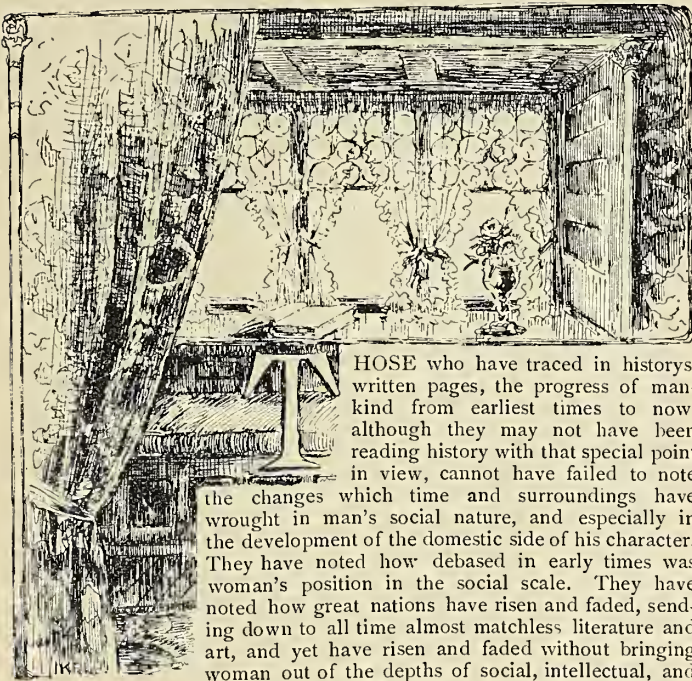
"ON returning to Philadelphia after the inauguration of the new plan of committing the public architecture to an official at a small salary, Dr. Walter was appointed professor of architecture at the Franklin Institute, and was soon after chosen to coöperate with Mr. McArthur in the construction of the immense public building at Philadelphia. In this, with other professional work, he was actively engaged almost to the time of his death, neither age nor infirmity sufficing to quench the ardor with which he followed his beloved art. In the profession, he took, from the first, the highest rank, and on the death of Mr. Richard Upjohn, the first president of the American Institute of Architects, he was practically the only candidate considered for the vacant place. During his long term of office he was untiring in his efforts to promote the good of the Institute and the profession. Although the meetings of the trustees were held in New York, nearly a hundred miles from his home, he rarely failed to be present; and his annual addresses at the conventions of the Institute were models of their kind. Just before the last convention, overcome at last by the weight of his eighty-three years, and the suffering incident to a serious infirmity, he sent word that he could not consent to accept a renomination as president, and a successor was chosen, with an affectionate reluctance on the part of the members of the Institute which will be deepened to sincere grief by the news of his death." The Executive Committee of the Western Association of Architects had taken action, making Mr. Walter an honorary member, which only waited for the indorsement of the convention. As the association did not meet until after his death, a committee was appointed to formulate a proper memorial to be sent to the friends of the deceased and inscribed upon the records of the association. In the grandeur of his life, we of a new Renaissance can look for a fitting example, and in his works we can see that much that we call good is simply novel, and though built in enduring stone, will be ephemeral in the light of a more studied and conservative age than ours.

HERETOFORE we have urged the necessity of an intelligent starting point in discussing the convict labor problem. The grounds for the punishment of criminals by the state lie primarily neither in the idea of vengeance, public or private, nor of financial reimbursement or satisfaction to the injured individual or to the state, nor of the reformation of the criminal; but rather in the idea of protection to society at large, or to the state viewed as society acting in an executive capacity. If a criminal is not so sunk in crime as to be wholly beyond the reach of reformatory influences, evidently the most effective protection to society consists in restricting his freedom until such a time as he can be sent back into society reformed, i. e., a self-respecting, self-supporting, law-abiding citizen. If he is incorrigible it is the plain duty of the state to put it beyond his power to inflict any further injury on society. The punishment of the criminal, whether reformable or incorrigible must be rigorous and severe, a lesson to him, a warning to others. His body and mind must be exercised or he will degenerate rapidly during confinement. He must be made to labor intelligently at a useful task and if possible must be made to think. Every man who labors at a useful task competes with some other man somewhere. This is inevitable and no juggling with the facts or sophistical argument can avoid this conclusion. Skilled labor is better able to stand up under competition than is unskilled; moreover, if a convict can without positive detriment to society be made to support himself and his family in whole or in part, he should be compelled to do so and not be permitted to be a burden upon the productive forces of society. This fit and necessary employment of the convict in productive labor should not bear with undue heaviness upon the non-criminal workman in similar pursuits, that is, its competition must not be an unfair competition, operating to lower wages, any more than would the same number of competitors outside of a prison; nor should this competition be in a few industries only, provided it can be as wisely employed in many.

THIS, then, is the convict labor problem in a nutshell; the protection of society at large apparently demands the confinement of the criminal at labor for a period of greater or less duration. That system is the best which, keeping this purpose in view, reforms the most criminals possible and perpetually restrains the remainder; that is the best system which, while accomplishing this, interferes least with other interests and imposes the least burden of tax upon society. Applying these tests to the various schemes in use, or proposed, we are led to the conclusion that the ideal system is one conducted on what is known as public account; that elementary and mechanical education, coupled with the teaching of trades is a legitimate and important factor in such a system; that the shortest sentence that will serve the purpose is the best; that all incorrigibles and short-time men who have mastered a trade should be rigorously employed in productive industry of some sort; that the competition thus necessitated should be as far as possible a fair competition, not bearing unjustly on any trade. Commissioner Wright, studying the problem in the light of his statistics, reaches a conclusion similar in many respects to that to which our argument leads. One thing is very certain, an intelligent treatment of criminals, in accordance with the principles involved in our statement of the problem, will go far to lessen the numbers of the convict class, to shorten the duration of the average sentence and to occupy the entire time of a large proportion of the short-time men in non-competitive work, such as physical, mental and moral education, manual training and trade learning; a system which will both promote the process of reformation and satisfy by its severity the ends of justice.

The Home.*

BY IRVING K. FOND, C. E. ARCHITECT.



HOSE who have traced in history's written pages, the progress of mankind from earliest times to now, although they may not have been reading history with that special point in view, cannot have failed to note the changes which time and surroundings have wrought in man's social nature, and especially in the development of the domestic side of his character. They have noted how debased in early times was woman's position in the social scale. They have noted how great nations have risen and faded, sending down to all time almost matchless literature and art, and yet have risen and faded without bringing woman out of the depths of social, intellectual, and moral poverty. They have noted the appearance of sentiment as it began to spread a brighter hue over history's pages, when the strong began to battle for the weak. They have noted how pure womanhood shone forth and became an important, the important factor in social and domestic life, and they note that now woman is not man's inferior—man's plaything, but his equal, his help, his inspiration. They note too that children are no longer slaves and, like slaves brought from a far country, ignorant of what is before them; under bonds and stripes, forced to work for bread and the father's comfort and convenience, without having a chance to develop their individual tendencies, until their spirits were broken, or so stunted in growth as never to be able to reach the heights for which they were intended, and perhaps for which they longed. They will note that children, young and old, have a word in the household discussions of today, or they leave the home.

Those who have read the history of the arts and architecture have learned how that at one time such a style flourished, and how, at another time such another style was in vogue, and if they have read appreciatingly this history, especially that pertaining to architecture, they will have learned that the development of architecture has gone on hand in hand with the development of the social character of the race. They will have learned that this is most especially so with regard to domestic architecture. As man's social nature broadened the lodging grew into the dwelling; and when true, pure sentiment dawned on the race, changing the unnatural relations which existed between man, woman and child, the dwelling grew into the home. For the purpose of this paper, we are not so much concerned in the past development as in the present status of the home and home life, and we need refer to the past only as, viewed in the light of the present, it will help to a more consistent and perfect growth in the future. These general remarks pave the way to a consideration of the house, and more deeply of that which it shelters, the home.

There are three principles which should be clearly understood by one who attempts to appreciate the closer relationship existing between this body and soul, the house and the home.

These are the principles which govern (1) the relationship of the builder to the house, the builder being the one who is erecting the house to be his home; (2) the relations between builder and architect, and (3) the relationship of the architect to the house. These principles touch so frequently, in fact are so closely bound together, that a discussion of each individually is hardly to be desired, but their main ideas will be developed as a consideration of the general subject would seem to demand, though broadly the main ideas are these: The house should reflect the builder's individuality and taste; the builder and architect should be in sympathy with each other, and the building should be the expression of the architect's highest art. Our criticisms of existing work and our judgment of work yet to be done will be more potent and trustworthy if given in the light which these principles shed upon the questions. It would be a waste of time to spend thought on much, perhaps on most of the existing work; but we are so used to it, its follies and vices are so common that we have not only endured, we have embraced them. It is just as worth our while to read and criticise the trashy novels and newspaper stories of the day, which make up the bulk of contemporary literary work, as to criticise the mass of houses. It would be like entertaining serious thoughts on the fine art of a lithograph or a colored poster, for the stock house bears the same relation to a true work of architecture, as a chromo lithograph does to a "Munkacsy," or as a popular song does to a symphony. Though, it is not a sad fact that the popular song and the trashy novel are the works of literature and music which appeal most strongly to the tastes of the occupants of the stock house? An unqualified affirmative would be too strong an answer, for the tastes and desires and ambitions of not a few dwellers in these houses are not indicated by the external appearance and internal arrangements of the houses in which they

live. This is especially the case in the large cities where multitudes are forced to rent and have to take up with what is furnished them by real estate owners and speculators. So one is not so much at fault, perhaps, for living in a tasteless house, located in a desirable neighborhood, and which the offer of payments on "easy terms" has induced him to buy, as if he had built the house out and out and in building it had incorporated his own ideas. It would hardly seem possible for one of refinement and good taste to be perfectly at home in a house which was designed for anybody and everybody, or for convenience say for the "average man." In regard to the mass of houses, it may be argued that if they are designed by the average architect, they will suit the average tenant, or better, that if the designer be a man who feels the public pulse and notes the swing of the public mind, his work will be in sympathy with the ideas of the generality of mankind, all of which is very much so. But the average architect is not a man who feels much, or is in very deep sympathy with the public; he has not studied the human mind very closely in its deeper and more serious relations and attitudes. He is not far beyond the public in the purity of his taste, the strength of his feelings, or in the originality and clearness of his thought. He is apt to follow a fashion, and in following this fashion, he is apt to follow public taste rather than to lead and direct it.

It always is and ever has been, that the masses are guided by a master mind. They do not always understand the workings of that mind, they do not ever understand the workings of that mind, but they feel its power and its force are resistless. A master mind in the development of its powers did not stand alone, did not work entirely within itself, but it opened itself to a world of impressions, it felt the beating of the world-pulse, it felt the throbbing of the world-heart, it felt and knew the yearnings and longings and aspirations of the world-soul, and in proportion to the strength with which it felt all this, it was a master mind. It is thus, the plain duty of this master spirit to lift the world into higher light and happiness; but it can succeed only in so far as the world, recognizing the power and beauty of the master spirit, lends it sympathy. Now it happens that the world too frequently recognizes the power and beauty, to a limited degree, but has not caught the sympathetic chord, and recognizing these attributes, it tries to get possession of them, all the while neglecting to go to the fountain head, whence flows this power and beauty, or ignorant of the existence of this fountain head. The master mind works because it has a great helping thought to express, because its rich feelings cannot be pent up, but flow out in full streams for whoever will partake. The lesser minds are apt to work, not because they have a thought to express, a feeling which cannot be restrained, but because the master mind has worked. Work is praiseworthy, work to carry out a great purpose is noble, but imitation of even the highest work, when the inspiring thought is lost, is unworthy of any man. And just here is where the average man fails. Here, for instance, is a poem, so sublime in the thought which underlies it, that one who reads in sympathy hardly knows the words. True the words move, free and strong, in full cadence and rich harmony, governed by the thought. The one who reads this poem understandingly will be moved to deeper thought and action, but he will not try to reproduce the poet's work. Another reads the verse, not knowing the thought, and certain repetitions touch him pleasingly, and certain combinations of words do not fail to make an impression on his ear, and feeling an inspiration he writes. There will be a pleasing jingle in his rhymes to some, but how like the clash and clang of discordant bells will his words fall on the ear of one whom the grand poem has deeply touched. This mistake is what the lesser architects of today are making; it is the mistake lesser architects of all times have made; it is the mistake which finally degrades a noble school of work and brings it into contempt. Failing to appreciate motives the architect copies bits of detail, which, while in their original states and amid sympathetic surroundings are beautiful, in their detached and altered states are little less than ludicrous.

If the power of the master mind lies in sympathetic thought its strength lies in the unity of thought and action; and we cannot teach the value of this strength of unity more easily, or have it impressed on the susceptible mind of the child more readily than by having its results shine forth in all the home surroundings. To make these results shine forth in the house is the architect's highest art. So it is apparent that in order to know how to work, the architect must understand the people for whom he is to create. He must grasp clearly their ideas. He must enter into their thoughts and harmonize them. He has not only to create, he has to arrange, to harmonize. He is to give no thought prominence or even place which will not contribute to the general unity. He is to simplify the ideas and desires of those he is endeavoring to help; he will restrain his own imagination often when tempted to give it full sway, and practically, he will so proportion the masses that when the capitals are carved and the string coursers molded, the building, as such, will be beautiful. He will so detail each stone or brick or timber of a mass, that it will be interesting and attractive according to its position in the building. Windows and doors and walls will be correctly proportioned and if windows and doors and walls are not correctly proportioned no amount of beautiful or expensive applied decorations, such as frescoes on wall and ceiling; heavy portieres, lace curtains, or handsome tapestries can ever make the room seem in good taste or atone for the primal defect. Furniture will seem lost or in the way, pictures will hang about in a restless manner and the sensitive person who must occupy the room is pained until his feelings become dulled by constant association with the tasteless surroundings. If, however, care and taste have been expended on these masses, a rug, a table with a book open upon it, a chair or two, and perhaps a picture, will suffice to make the room look homelike and inviting.

Questions will arise as to how "masses" can appeal to the home feeling, and what is the general character of masses which so appeal, if indeed they do. They most certainly do so appeal and how and why will be suggested in an analysis of the home feeling. Rest and sympathy—these are the potent factors of home life. Rest, a quiet repose, to which we may fly after the necessary struggles for existence, for bread, for fame. A calm repose, which permits a season of deep meditation and a contemplation of

*Paper read before the Saracen Club, Chicago, November 3, 1887.

thoughts and things above and beyond the doings of our social, professional or business lives. A deep repose, where we may drink the refreshing and invigorating draughts and arrange our forces for the battles to come.

Sympathy—sympathy which makes us strong in the knowledge that every heart in the home is in accord with our own. That there are no foes to fight within, that no discordant element can enter. Sympathy which begets perfect trust and confidence, which cannot question motives. Sympathy which makes every member of the home circle believe that every other member acts from high principle and cannot be influenced by sordid thoughts of self. The world gives no such sympathy, even to its purest men; the home alone can furnish it, the sympathy which begets, which is born of love.

From the time when man first began to feel, broad, low masses and horizontal lines have carried to his mind the suggestion of strength and repose, because of their sympathy with the earth which was to him the highest external expression of these attributes. And so long as his gods were of and on the earth, horizontal lines and masses gave character to his temples. As man developed his eyes left the horizontal plain over which they had moved, and turned upward. He aspired. He could see into the sky which veiled the beyond, while looking in the old horizontal lines, but the earth obstructed his line of sight and the dust blinded his eyes. So to get a clearer view of heaven he looked upward, and vertical lines and light vertical masses came to express to him, aspiration, soaring out of which soon grew the ideas of lightness, airiness, grace: So when his gods, when his God became a God of earth and heaven, strong vertical lines began to appear in the temples, there was strength and beauty in this, but when his God became the God of heaven alone, thin vertical lines and masses gave character to the temples, and was it any wonder that from a human standpoint, thin vertical lines and masses should mean weakness?

Thus, a house with a long low roof line and a broad, low treatment of the parts seems to be a thing of the earth and as such it appeals strongly to man a creature of the earth, man who draws his life from the earth, who shivers when the earth is cold and damp, who rejoices when the earth is warm beneath his feet, and who finally returns to and rests in the bosom of his mother earth. So light vertical lines and masses should be used with care in the homes of men, only should they come to impart grace and airy joyousness, but never to conflict with the more sober masses.

Let us consider these masses a little more in detail, touching at first the main portal. The front door, as it is commonly called, cannot receive too careful consideration. It is the entrance to the heart of the home, and its threshold should never be crossed by one who is not to receive a cordial welcome. It is the first door through which the guest is admitted and should indicate the breadth and unity of the family life, the hospitality of the home. It is the last door of the house through which a child born into the home passes, and while it should not be so broad that he will feel it an easy matter to leave the home and go out into the world, it should not be so narrow that, being without, he cannot fly quickly through and find shelter within. It should be so low that the bowed head of sorrow will feel its sympathy; it should be so high that the child of gladness shall fly through freely without dipping too near the melancholy earth. It should never be so high that the raised head of false pride can enter, no matter how richly the portal may be carved. It should be so low, so lowly, that the responsive heart will meet its thought and the reverent head will bow instinctively as it passes under the lintel into the home. This is the sentiment of the door and it must touch with more or less of a thrill the heart of every man who is welcomed into a pure home. But there is a practical bearing to all this, and practically it means that there is not a home in existence whose principal portal need be other than a low, broad, single door; and there are practical reasons which appeal as strongly to the tasty housewife as does the sentiment to the poet. Perhaps there are reasons which will appeal to the master of the house whether he be of an economical turn of mind or not, so long as he is a man of taste; but these reasons need not be discussed here. From both standpoints, it is unfortunate to have the door so small that the householder returning late at night and "very tired" is unable to find it, except after a labored hunt, and it is equally unfortunate to have the door doubled up and so large that the coachman could drive in with his coach and six without violating the proprieties. As to the other doors, they must harmonize with their surroundings, and must be treated with care and taste, for what the front door is to the house, the other doors are to the various parts.

The window is the eye of the house. Even a careless observer knows what character is given to the face by perfect eyes, and too, what character is lost or taken out if the eye is too large or too small. The bright, perfect eye catching the happiness of the sunshine without and sending it to the brain within! There is no more beautiful feature in all the realm of creation than the perfect eye, nestled under a fringed lid, lighting a clear brain and lighted by a loving heart. Shall not the eye of the house be carefully studied? The window must have a purpose and must be of proper size and in proper position to perform its duties perfectly. There seems to exist so general a misapprehension of the functions of this feature that a clear exposition of them cannot fall amiss on those who care to see it employed always in its most beautiful forms. The primary purpose of the window is to admit light and air. It does not take a very large opening abundantly to perform this service in an ordinary room. The next purpose of the window, and in cities, a minor purpose, is to allow occupants of an apartment to view the surrounding landscape or to see what is going on in the streets. As the curiosity of the race grew it was not enough to look across the street, or to see what was passing, one must know everything; coming, passing, going, the whole history of the street, past, present, future; and so oriel and bay windows began to take form, the narrowness of the house front making the bay take on oftener than otherwise very ugly forms, along our city streets. What can be more abominable in proportion or form than the long, narrow windows, in separate openings and arranged in series, reaching from floor to ceiling; sending the light in long criss-cross lines over the floor and up the walls, making streaks of dark and light across the ceiling, making hard harder. No soft diffusion of light is possible with windows of this character. The light at the floor is wasted; the

light at the ceiling breaks unpleasantly into the forms of the decoration unless the ceiling has been designed especially to meet head of such a window, and that never happens in houses which have windows of this sort. The manufacture of plate glass and the cheapness and readiness with which large plates can be procured have given us another form of window, in some ways more undesirable than this last. A large sheet of plate glass from floor to ceiling, from wall to wall! Could anything be more distasteful to one who sought his home for the strength, the repose, the retirement from the world, it would afford him? It would be hard to make ordinarily sensitive people believe that a man of even fair taste, to say nothing of a man with home feeling, could live complacently or comfortably behind a window like that. As you glance at a window of that sort from the street you see one of two things, a mass of draperies and hangings of various colors and weights, obscuring much of the window from the inside and from the outside giving it much the appearance of a show window of a retail dry goods house, or you see an interior hampered with furniture and over-loaded with useless, tasteless bric-a-brac. If it were the purpose of the house to be a sheltered retreat for those whose highest aim is to watch the streets, there might be some sense in these large windows. But what is most desirable to see and know about a house lies in the inside, and when a member of the family finds it desirable to be near the window, that one must find it desirable to have a comfortable resting place. Hence a window not running down to the floor but with a broad window seat, at a little less than chair height, and a sill somewhat higher up will be decidedly to the purpose. If the seat does not exist in permanent form there is generally no need of placing the sill nearer to the floor than if it did, for a chair must be drawn up to take its place. Then, too, a piece of furniture is never a black skeleton or a dark, shapeless mass in rooms in which windows are so placed for the brightest spot in the room is never near the floor, behind a chair or table as is generally the case where windows run way down. The artistic freedom which a high sill admits of in the arrangement of furniture is manifest, while the beauty of proportion of window and wall which it not only admits of but almost requires, cannot be told in words.

Interiors of certain of our houses have lately taken on a new aspect, and a very peculiar one, too, especially on the home floor. Partitions have been done away with. Turned posts and useless, ugly arches, filled in with crude spindle work mark where partitions should stand. Sometimes a beam marks the line, suggesting to the visitor, if not to the members of the home circle, a "freak," an animal born into the world minus certain members, with only a lump or skin and bone to mark the place where nature and the eternal fitness of things intended a useful member should grow. This is accidental in nature but it is happening too frequently in houses to admit of the theory or hope of accident. The difficulty in decorating ill designed wall spaces may have led certain persons of taste, who have come to think that of necessity wall spaces and partitions were "inartistic," hence undesirable, to an abandonment of partitions and to substitutions as noted. This is the generous criticism of motives. More often it arises from a total misconception of what the home should be, of what various rooms should be used for, of what a life of refinement and self control is. Where is the sense or beauty, in placing a row of bookcases down the middle of the drawing room! That that is the position where the library partition naturally stands is not enough. Why should the reception room be made part of the staircase hall, where members of the household wish to pass up and down freely and unobserved? What is the beauty of a screen of turned spindles, compared to a piece of fresco work, or even to wall paper of fair design and good color? A wall which is performing its purposes of supporting the ceiling and of separating individual rooms does not detract from the dignity of the house. A wall which, having marked the boundary of a room is decorated as the uses of that room would naturally dictate, is a useful and beautiful feature, and allows of a convenient and artistic disposition of furniture and pictures. A broad opening with heavy portieres which can be pushed aside when occasion demands admits of easy communication between rooms and is much more effective than no wall at all. It happens more often than otherwise that a desire to be considered unique and odd is accompanied by a lamentable lack of good taste.

Conservatism in building will be found to be a good rule unless the builder has at heart some deep principle which dictates a change.

Every building, as every life, should be the expression of one simple, pure thought or purpose. This is the highest law of life and of art. In the dwelling it must be to instill the deep home feeling. Nothing is in good taste, nothing to a sincere mind is tolerable which breaks in upon the general unity. This law is violated so frequently in art as well as in life, that to the multitude it does not seem to exist. The extremely bold manner in which this law is transgressed in the design and furnishings of many dwellings, inspires a peculiar feeling of fascination and we look on half charmed when we know at heart that the whole thing is disgusting and repulsive. The boldest manifestation of this lawlessness exists in a house heaped together after this fashion. A parlor in imitation of the Greek, a music room or a chamber in imitation of the Egyptian, a morning room after the lascivious French style, a card room done in the Gothic and a dining room in imitation of the Chinese, or Indian. In imitation it must be understood, for the thoughts, the feelings, the civilizations which made each and every one of these styles possible and in good taste in its own time and place are absolutely impossible today in the light of western civilization. Buildings of this and kindred sorts can hardly outlast the lives of their "freaky" builders; they will probably be pulled down and rebuilt in other styles by the same tastelessness and unrest that called them into existence. The only bright side to it all is that the builder may have been trying to express his own thoughts, though of a disjointed and fantastic character, and, knowing his weakness in original invention, had fallen back on forms which men of taste had told him were perfect in their several ways. Insofar as he was expressing his own ideas he was treading toward the paths of art, and if a missionary in that field had taken him in hand in infancy, results might have been different, but this is doubtful.

Perhaps this criticism does not fall with its real force, because of the general want of knowledge of art standards and rules. So a question will suggest a parallel which all will appreciate. What would you think of a novel, or say of a history of the United States, where one thought was expressed in French, the next in German, the next in Choctaw, the next in Patagonian dialect, as a work of art? What do you lovers of the histrionic art think of Othello, with an Italian Othello, an English Iago, and an American support, as a work of art? You know it is hardly in good taste to put such questions to intelligent people.

Let us note again, briefly, what has been touched upon in preceding lines. What we are shows in our work. It is the work of the architect to bring conflicting ideas into harmony, not to crush out individual thought, but to strengthen and purify it; to awaken a desire for the knowledge of the beautiful, and so far as in him lies to impart that knowledge; to bring the thoughts of various members of the family into concord, and to bring the art of the family into sympathetic relationship with the world of art. That this is a complex work for one who works over even a limited area, will be appreciated as we proceed.

The natural features which go to make up the general character of a country, its climate and soil, its mountains and plains, its forests and pasture lands, its seas and water courses, have a direct influence on the character of the inhabitants. There will be certain tendencies toward thought and action in the mountain dwellers which do not exist in the minds of the dwellers in the plains. The heartstrings of him who draws his inspiration from the sea do not tremble with the same song that bursts from him who lives above the clouds, and holds close communion with the stars which seem to swing their lamps just before the door of his mountain home. The homes of men in these varied localities are as different in character as are the men themselves. If these men are units of the same great nation, a nation which has had a deep, full history, and has kept its national individuality throughout disturbing decades and disintegrating centuries, no matter of what locality, these men have broad national characteristics which distinguish them from men of all other nations, and their homes have a national character which distinguishes them from the homes of men of other nations. The influence of nature is more noticeable at the present time in the provinces, where nature still holds sway, where superficiality and the affectations of society have not cloaked the feelings, or like a snuffer, extinguished them entirely; but the workings of the national influence is everywhere apparent. Whatever is true of older nations in this respect is true of ours. We are in harmony with our surroundings, our homes are in harmony with their surroundings; our surroundings are in harmony with us, but it is the harmony of discords. A new, mighty, rapidly developing nation. Cosmopolitan? Yes, to a slight degree. A white father, a black mother, an Irish husband, a German wife, born in France, in Japan, in every out of the way corner under the sun, come here imbued with the American idea, "progress, liberty, license," with no ideas on the subject or with conflicting ideas of home life. Time has a great work to perform here. In all this discord there are two elements which appeal to thoughtful men and find response. One is the colonial home of New England and the other is the dutch home of New York, or better, New Amsterdam. The builders of these homes did not come here full of enthusiasm for the American idea. That developed later. They came to spread the power of the mother country. The men of culture from the hill country of England found harmonious surroundings among the hills of New England. The worthy burgher from Holland found harmonious surroundings in the low, marshy flats of Manhattan Island, and New Amsterdam arose from the water. These types of homes could not flourish broadly after the spirit, the new spirit of the country, made itself felt, but their influence has been for good, appealing as it has to men of thought and sentiment. The cheapness of prints and photographs, the almost unlimited publication of designs has tended to give to the architecture of our homes an almost national air. If the models had been correctly chosen the good arising from this wholesale dissemination of prints would have been almost incalculable, but it has been mostly the showy, shallow pattern that has been followed. The seaside cottage has lent inspiration to architects of wild, mountain proclivities, or of tame prairie tendencies from Atlantic to Pacific. The seaside summer cottage, which was never designed for a home, but was simply a distracting piece of building erected to cover the little social informalities of those who had fled the heated city, after the wearing social formalities of winter city life. The seaside cottage was a thing of taste, for it suited the purpose for which it was designed, and if its imitation has done no better it has served to put the architect on a new track, and crowd out those utterly tasteless abominations the French roofed houses, which in their dreary homelikeness have laid desolate so many of our beautiful hilltops, and have marred the otherwise beautiful streets of so many of our towns and villages. However, it was a poor model to take for a home.

Hand in hand with the development of our national home, architecture is our national home life. Shall we have a typical home architecture worthy to be handed down through the ages? Yes, when we have a pure, broad, sympathetic home life, not before. There will always be single, beautiful examples of home architecture wherever a refined, sympathetic family has worked in harmony with a true architect; this will never become general till certain necessary qualities have become general in the race.

The typical American home would certainly be the highest type of home, a democratic home where love rules, not where the queen mother or king father exacts service and obedience from children who are merely subjects, as in the French *Chez-nous* which is hardly to be called a home! Not where the elder child tyrannizes over the younger, simply because he had the misfortune to be born first, and his parents through lack of experience had spoiled him in the raising, as in certain English families; or where, as in certain other English families, the husband makes a practice of beating his wife, she of beating his children and they of beating each other. And not where, as in certain German families, the husband lives well off the combined labors of his cow and his "frau" harnessed to the same plow or cart. Whatever is good and pure in the home life of these various nationalities we want, for there will be need of variety in a great land like ours; but whatever is evil we must not only shun, we must crush out. Ours must be a democratic home, in which every member shall learn the lesson of self-control, efficiency and helpfulness; where the voice of the weakest child shall be heard in tenderness and responded to in love; where a quick sympathy shall detect, foster and develop whatever is noble in the child; where a gracious power, a power as gentle as the soft zephyrs, as mighty as the awful whirlwind, shall uproot the evil tendency and leave the child unscarred; as a garden, whence every weed has been taken without uncovering a root or bruising a flower; a home where wife, mother, means sweet sympathy, where husband, father, means strong protection; where child means reverence and trustfulness; where son and daughter means the perfect image of father and mother.

Capitalists—oppressors of the poor cannot be reared in this home.

Agitators—curses of rich and poor cannot come from such surroundings.

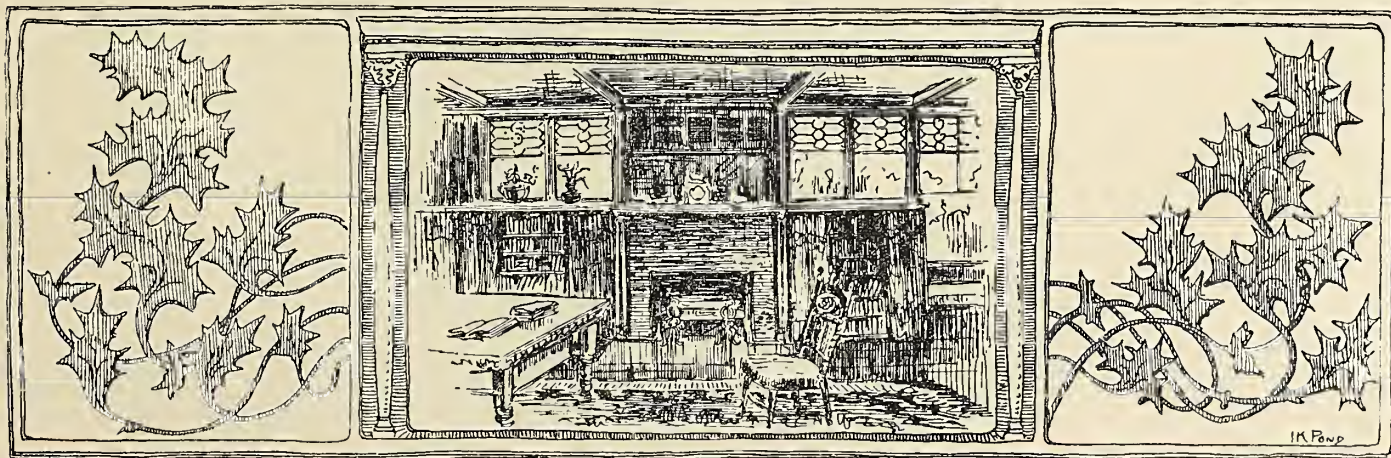
Anarchy—murderer of the peace, cannot be bred here.

Revolution is not nurtured here.

Extreme wealth cannot brighten this home.

Only extreme poverty and death can cast a shadow there. This is the ideal home! Can it not, may it not become the typical home?

One evening I took up my pen to formulate certain thoughts and theories I held concerning the home. Before I had soiled the paper an impulse led me to the streets, and then the ideals, which had been rising before my mind's eye, the theories, which but a little moment before had been warm, and eager to flow from the pen, began to chill and a walk of two or three miles tended rather to stiffen them, than to warm them into new life. A turn about the streets of a great city at night will disclose a great many facts, and arouse a great many questionings, which in the broad daylight do not appeal to us. Very few of us let our eyes rise above the level of the streets, while we are in the city about our business or pleasure, and as we walk or ride down the avenues, lined with dwellings and houses of various sorts, we rarely let our thoughts go beyond the range of our glances which may sometimes reach as high as the cornice but seldom get above and never behind the front door. Yet almost every window we pass gives light and air to at least one human being, a part of whose existence is dragged wearily out, or speeds lightly behind the dusty panes. "Where the lamps quiver * * * from window and casement, from garret to basement," no wonder the poor, houseless, homeless girl stood amazed, trying to solve life's mystery and glad to find the answer in death's. Think of the weary multitudes, each letting his light shine out to a restless fellow man outside, yet giving him no light, filling him with questions and amazement. The window is a more conspicuous feature at night than it is in the daytime, for the light shining out from scenes of gladness, and though shut in, struggling to escape from scenes of misery and crime, cannot help but draw the attention, and in thought we see what is within and behind; and the more lighted windows one sees at night, with deeper sorrow appeals to his heart the homelessness of the race. Houses—houses—houses—how few homes! Block after block, row upon row of boarding houses, apartment houses, hotels, tenement houses—how few homes! So if one in the quiet of his lodgings begins to theorize on the home, to make it the base of all goodly supplies, to make it the parent of the schools, the foundation of the church, the cornerstone of the state, the safeguard of the nation, the chief product of a high, sincere civilization, the chief ornament of a pure, honest, earnest society, such an one has only to go out into the starlit streets and gaze on the array of lighted windows, to be convinced that in his theories he is living far beyond this age—perhaps in a future so remote that the race will never grasp it.



Illinois State Association of Architects.

THE regular monthly meeting of the State Association of Architects was held November 6. There were twenty-five members present and several visitors. Among the latter were: J. E. Wolfe, of San Francisco, editor of the *California Architect*, and J. Mulvey, of Aurora, Ill.

After luncheon, President-elect S. A. Treat called the meeting to order, addressing the meeting as follows:

Mr. Treat: Gentlemen of the Illinois State Association, there is so much business before the association this afternoon that your president has concluded to postpone his inaugural until some more favorable time. The brevity and pertinency of the address elicited applause.

The minutes of the preceding meeting were called by the president; were read by Secretary S. C. Berlin, and approved as read.

Upon the request of the president, L. H. Sullivan, chairman of the Executive Committee, reported the progress of the ensuing year, which included the continuation of the symposia, and a series of lectures by experts on sanitation, cements, mortars, etc. The programme of the day being:

First. "To what extent, if at all, is it desirable that the association insist that all the members shall charge uniform prices?" Affirmative, D. H. Burnham; negative, W. W. Clay.

Second. "Is the blending into one national architectural association or society, of all existing societies desirable or practical?" Affirmative, D. Adler; negative, N. S. Patton.

Mr. Adler said if Mr. Burnham, or the association, had no objection, he would like the second topic for discussion taken up first, as he had an important engagement that would call him early away from the session. His request being acceded to, he at once entered upon the opening of the discussion by stating the question as "Whether the blending into one national architectural association of all the existing societies is desirable," and affirming as his belief that such a union is desirable, inasmuch as it would be of advantage to the profession as a whole, everywhere. The very circumstances and desires that led to the formation of the Illinois State Association—that led to making it a part of the Western Association would naturally lead further, in a desire to become a part of a great national association which would represent the entire profession of the country. It was reasonable to suppose the general public would recognize and value any association claiming to represent the expressed sense and wishes of any profession in its entirety, more than one of a local character. The character and influence of an association, too, was judged by the number and extent of its membership. This matter of membership too, has its influence on the profession, and is an important factor in determining whether the organization represents the wishes and desires of the majority or only a minority, therefore, from this point of view, in the matter of public confidence and in the confidence and respect of the profession, it is desirable. The objection that might be advanced, that in an association of a national character, the qualification for membership might be made so very high as to necessarily make the number of its members so limited as to defeat the force of the argument of numerical strength, was met by presenting the difficulties that lie in the way of determining who should constitute such an aristocracy of the profession, the fact of the standing in the profession being in a large sense the opinion of individuals themselves, was fully discussed, and it was given as his opinion that no higher qualification should be demanded for eligibility to membership than to be known as an honorable member of the profession. This would include the average practitioner, and therefore more perfectly and thoroughly unite the fraternity, the object of the proposed unification. In the future, when the organization has grown, and embraces all or nearly all who are desirable, it may then be preferable to make the standard of membership very high, but it is better now to have an average qualification so as to secure the largest number of members. The work to be done by such an organization was reviewed, such as securing proper legislation, settling methods of practice, ethics, and such other general matters pertaining to the profession as are of a general character, and in which the public is interested. This, it was alleged, was self-evident, could better be accomplished by a well-organized and disciplined national body, than by any number of smaller independent organizations with as many plans and ideas as there were organizations, and wherein there could be no real unity of action.

Mr. Patton opening for the negative, commenced his remarks by saying he had not been able to give the subject attention until the evening previous, when he found his ideas so incoherent and illusive that he fastened them down on paper so they would stay.

N. S. Patton: Four years ago we had practically a union of all the architectural societies in the American Institute, there being no other society with more than a local character. There arose a strong feeling that this society was not doing all that was needed by the architects of the West, and that a new organization was necessary. The success of the Western Association of Architects, whatever may have been its shortcomings, has certainly been sufficient to justify its existence. Have the times "advanced backward" that now we will be better served by returning to the old plan of a single society?

If the circumstances which led to the formation of a second society were temporary, and have now passed away, then we may with reason question the propriety of continuing its existence; but on the contrary, if the causes were permanent in their nature, they will remain as arguments for the preservation of the new organization.

I maintain that the chief reason for the starting of the Western Association of Architects, is suggested in the very name of the society. It is the geographical question, arising from the vastness of our country. The American Institute had already extended its influence about as far as it would stretch. It could not take in the West without neglecting its own special territory. There was no revolt against the Institute, but a formation of a new center of influence in the Mississippi valley. The old society, having its headquarters on the Atlantic, reached a thousand miles westward, the new one, starting at the great metropolis of the lakes, may reach another thousand miles, and then we shall need a third to span the continent to the Pacific.

But it may be answered that there is no intention of returning to a single organization of the old style, but to invent a new system of union, such, for instance, as that proposed by Mr. Burnham in his paper before the convention of the Institute. No one will deny the necessity of cooperation among the architectural associations as a matter of common interest, but the question before us is whether that cooperation shall be carried so far as to make a complete union.

We can better comprehend the situation if we consider in detail the various ends which we propose to accomplish by our associations, and then judge each case by itself; whether a single national organization, or several working side by side will best accomplish the end sought. Suppose, for instance, that we take the recent convention of the Institute, and notice the various objects which it accomplished, or sought to accomplish.

The first subject to receive attention was the improvement of methods in the architectural service of the federal government. This is one of the questions of national importance, and could undoubtedly be pushed more vigorously by a grand national society, provided every architect of good standing could be forced to join such a society; but, here is just the difficult point, namely, to persuade all the practitioners to join the society and maintain their interest in it year after year. In the absence of a society of a universal membership, it is doubtful whether the membership of the Institute and the Western Association could accomplish any more if united than by cooperating, as at present.

The second subject was that of building contracts. In this case a general society might save a little time; but the appointment of a committee to join another from the Western Association, and confer with the builders, with power to act, is about as short a cut as could well be taken.

Excepting a slight allusion to architects' protective associations and a permanent home for the Institute there was no other general subject discussed at the convention except the one that we are now debating. If the various societies should actually be united then this topic of discussion would be lost, and the ponderous national body would quite likely find itself short of material for convention debates.

This brings me to the point which I wish to make emphatic, namely, that the main business of an association of architects is not and never will be the discussion of questions of a national character.

Referring again to the recent convention; how was the time spent? Mainly in listening to the reading of papers on special topics and in a social way before and after the sessions, at the lunches, dinners, etc. That is to say the social element is the most important for even the reading of papers is valuable largely because of its social feature. If the object is simply to impart information such papers may be printed in the architectural journals and there need be no convention. When, however, we listen to a reading we not only acquire the information but also an acquaintance with the author that leads us to resolve that in our practice we will not antagonize him but will rather join with him in all efforts for our common welfare.

The first point made by Mr. Burnham in his plea for the union of organizations was that, "Art needs sympathy." "Therefore kindly intercourse among architects is useful" and adds, "A man when tempted may wrong his fellow but is less likely to when both are of the same society."

But membership in the same society will be a feeble bond, unless there be added the personal acquaintance that makes us not only associates but friends.

Mr. Burnham suggests "a code of ethics for architects." This may be drawn up in less time than it will take to form a national union of our societies.

The difficulty lies not in the code but in the execution of it. We do not need an elected national architectural legislature to form laws, unless we can have an executive of equal power to enforce them. But we cannot enforce penalties on those who are not members and we cannot force them into membership. We must work not by force but by persuasion. This persuasion cannot be done at wholesale but must result from the personal meeting of architects. This is the basis of the geographical limits of an association. The territory must be of such size that a fair proportion of the members can attend the conventions held within its limits. The most useful organizations are the city and state associations, because these can have frequent meetings and a large proportion of the members can attend each meeting. There an architect will meet those of his associates with whom he will most frequently have business relations and the friendly acquaintance formed at the association will be a great stimulus to a proper execution of his code of ethics." But every man with a considerable practice reaches out beyond the limits of his own city and state and therefore it is fitting that his professional fellowship should be coextensive with his practice. For an average man we may set 500 miles as the limit of his effective range. Beyond this his hits are likely to be few. The law of natural selection will divide the "happy hunting ground" of architecture into ranches of about a 500-mile radius. The long range men are the exception, and the rules are not made for them. They can buy stock in two *Schuetzen Vereins* and fire over the heads of these short range associates.

Mr. Burnham responded next on the affirmative side. He stated, that he agreed with pretty much everything that last speaker had said in the matter, but that it must be borne in mind there is such a thing as a long range. Every one present could name a dozen men in New York, who did business in Chicago and through the West, and it should also be borne in mind there was among the Chicago architects those who too did business throughout the West and even as far east as the Alleghenies. Now, he argued, there should be some general ground of agreement, on which all architects could meet; there should be an understanding, as to what is a proper price among the profession for services, so that eastern men and western men shall be on equal terms in all territory. This must be done by a specific association, not a local one. It must be by an association representing the entire body of the profession. In the West we have lowered fees, and there is a tendency to encroach on each other's rights. In the East they have got over that, and where a man there has a well-established

practice, he can afford to stand on his dignity, in a certain way, and people must come up to his code of ethics. Not so with us. If a man goes to a frontier town, far away from Chicago, he feels that he has a certain freedom and is released from certain restraints, that a strict professional sense of honor would hold him to. If he belonged to a society of architects, he would not countenance what he might otherwise do, he would hate to do anything to interfere with his neighbor's rights. Mr. Patton, he thought, did not quite fully state that one point in his paper. He believed, himself, that local associations did all that was claimed for them, and that they were the repositories of local interest and that they should make it a business to study local questions, but in matters that covered the entire country, nobody can be expected to live up to a right standard without it is authoritatively uttered. Men will live up no higher than their belief. No matter what they may profess to believe, what they do is the evidence of what they really believe. The speaker referred to the temptations when free from wholesome restraints to lower the tone of the profession, as "this man and that man does so and so, and if I am going to live in this community, I must come down to the same level to succeed." It is much harder to live up to a belief which represents the best for all. It was his opinion, that a national organization, like the one in question, was the proper remedy for the emergency. It is no longer to be looked upon as a good thing to have, but had become a necessity. Local organizations often took up these vital questions. There obtains a certain range talked over without coming to conclusions, and then the subjects are dropped and forgotten, except by a few earnest men, as if they had never been talked about. The reason is, men live up to the exigencies of the moment. He thought the only remedy was in a code of ethics on a competition basis, to relieve men from the temptation to encroach upon the rights of others. He confessed that he had been so tempted, and he had no doubt, that others had been likewise. He thought those questions of practice, which have not been satisfactorily decided, should be by a national society, which covered the entire country and which the architects of the country recognized as their representative body; that this society in its code of ethics should lay down the rule, that in case an architect has been approached by an owner who proposes to erect a building that had already engaged with another architect in reference to its construction, that every other architect should stand aloof until the owner can show he has settled with the former, and that his services have been dispensed with. This position has often been discussed and talked about by architects, but there has never been anybody or architectural society, that has made the rule. He did not believe there was a man in the room but was down on the wrong, and yet all were constantly tempted with that sort of thing. Why not have this thing put in plain language, making it unprofessional and dishonorable? It would do no good for the Illinois association to do so. Suppose such a code of ethics was adopted by the association. We are ambitious to do work. Suppose Mr. Hill should go across the state line into Iowa, or Minnesota, and should in a case of violation call the attention of the offender to it. What would be said? "Oh, that is what you fellows do over in Illinois, but we do things differently here." You may say you don't care, that it won't cut much of a figure, but still it will affect you in every competition, in every piece of work you do. There is no use in denying the fact. You have got to go into competition. It is in the blood of the Anglo-Saxon race. The question of an honorable competition has got to be clearly defined. It cannot be through the action of several local organizations, as the idea of proper ethics differ in them all. The only way in which the profession can meet this question on a common ground, the only way in which all men can agree, is through and by a national representative body. He believed the effort to establish such an organization was worth the while, for the sake of having a code of ethics as an experiment, which if it did nothing more than establish a fair price for services, which would remain ever afterward; if the society gained no further permanency, that one piece of work would be worth all the effort. The probable effect of a membership in such a national organization was illustrated by the results of the state association, wherein he said, there is not a man in the association, that is not more kindly in his deportment to his fellow members and more cautious in his criticisms than he was two years ago, and as to the educational influence, which would find a reflex in the national organization, he said "now I could not come here if I knew I had done an injustice to any member. I could not look him in the countenance, but would shrink away, feeling the loss of my own self-respect. So there is a value right here that is a practical value.

Mr. L. H. Sullivan said he thought the time was up for a code of ethics to be adopted, which would cover the professional practice of the entire country, and that such a code should be the work of a national body, or congress. In connection with that work came up another question, namely, it should be the duty of the architects of the country, to protect their fellows in matters which involved principles of law, that in such cases it should at once pass out of the hands of the individual into the jurisdiction of a central association, and thus become, as it were, the personal matter of every architect in the country.

Mr. Patton arose to an explanation of argument, which was not to be taken as a representation of his views. He was appointed to take the negative of the question, and as Mr. Burnham's paper was the biggest thing in sight, he tackled that. But in making all due allowance for what he regarded as beneficial in local organizations, he was in favor of a national union, which he thought could be brought about without giving up any of the advantages derived from the local organizations.

Mr. Burnham remarked, that it seemed the only negative had been converted to the affirmative belief.

Mr. Clay moved to accept Mr. Patton's apology. Mr. Boyington said he had listened to the reading of Mr. Burnham's paper before the Institute with a great deal of interest, as well as the debate. As far as a general association is concerned, it seemed to him a little difficult to establish one that will meet all the requirements. He looked upon the American Institute of Architects as the parent institution of the architectural associations of this country, and he looked upon that name as covering all the requirements of a general organization. Still, as it had been suggested by

Mr. Burnham's paper that the national organization should be located at Washington, or if not there, in New York, it would seem it would not cover, in his estimation, all that was required of such an organization, which should be a central association, perhaps subordinate to the American Institute, and in his (Mr. Boyington's) opinion, it should be located at Chicago. Then local organizations connected with it, or representative of it, could be throughout the country. He discussed the question of qualification for membership, and was of the opinion that if a very high grade was thought preferable for the parent, or central institution, a lower grade of qualification would be better for the subordinate organizations, as there were hundreds upon hundreds who would never aspire to obtain a high degree, but would be content with the possession of lower merit, and yet who were desirable to have identified with the movement. There would then be a large number who would not become members of any association, and with this class of practitioners the organized would have to come in contact. Still, to accomplish what was desired, it was nevertheless better to establish a code of ethics that would reach out generally over the country, and thus benefit the profession at large, and leave those outside to do as they please. In time the public will come to understand this proper course, and those in the profession who refuse to accept the situation will discover that they will be without power to do harm. He referred to Mr. Burnham's remarks in regard to the employment of an architect by an owner who had already the services of one engaged on the same work, and argued that Mr. Burnham's position should be a thoroughly and plainly established rule of action by associations. He cited an experience of his own of this character, where he was called to a western city, and upon investigation found an architect had already been employed on the work, and stated his refusal to render his services unless the owner should satisfactorily settle with the party previously engaged.

At the request of the president, Mr. Wolf, of San Francisco, was invited to join in the debate, who responded by referring to his thirty-seven years' experience on the Pacific coast, and picturing the progress of architecture from 1851, when the principal structures were constructed of boards placed endways, and nailed in position by anyone who could drive a nail, and which, in the better structures, were plastered by tacking on cotton cloth; when communication with the outer world was by Panama steamships, and a sixty-day passage was considered a marvel of speed. One of the great drawbacks to architecture in San Francisco was in the desire for temporary buildings on the part of the owners who expected to make their fortunes in from two to five years, and only wanted structures of corresponding durability. Another drawback was in the outside land boom. Large sums of money had been invested in speculative sand lots, outside of the city, notably at San Jose, where the money paid out was not likely to be returned for many years. Dennis Kearney's reign was another serious cause of architectural stagnation. Family after family left the city, and houses could be bought for a song. In 1880 a revival of building began. A little over a million of dollars was expended that year. The following years the sums ran up, five, six, seven, and last year reached between eight and nine millions of dollars. Building is wonderfully active at Los Angeles. The city has grown up in a few years from a mere village to a city of near thirty thousand inhabitants, and the present demand for draftsmen there is greater than can be supplied. The speaker then referred to the status of the profession, relating that three attempts, in San Francisco, had been made at organization, and only the last, which has succeeded as a chapter of the American Institute, had succeeded, which has a membership of fifteen. Mr. Wolf spoke in favor of the adoption of a code of ethics, and held, with the affirmative of the question, that it was the province of a national organization to promulgate them.

The president announced that the discussion of the topic as to the desirability of adopting a uniform scale of prices was next in order.

D. H. Burnham opened the affirmative by remarking that the same question came up in the discussion of the present topic, that had already been discussed in the former. "What makes a proper association of architects?" It seemed to him on that basis alone, the whole question could be solved. If the association was one for social enjoyment only, the matter of a scale of prices was of but little moment; but if the society was for the benefit of its members, then the question was one of vital importance. In being asked to take the affirmative of the question, he did not understand that he was expected to advocate that the association was bound to adopt and enforce a detailed and fixed set of prices under penalties, but to discuss the desirability of having some definite rule of agreement in respect to prices. He himself did not believe in trade unions, or in binding men by ironclad oaths, or in secret societies to uphold business occupations, but it did seem to him there should be an agreement fixing a minimum limit for professional services. And this brought the consideration back to the same point; the right of one man to interfere with the rights of another. In this respect he thought in connection with the schedule of fees the association should make a clearly defined rule that where two or more architects were consulted by an owner in relation to the erection of a building, each should be held rigidly to the scale of prices, and a violation of it should be dismissed from the society with a publication of the name of the offender. He referred to a somewhat too common practice of underbidding, through personal considerations for the owner, and similar influences, engendered by a spirit of greed for work, under which men grew selfish and became more and more, as he alleged, an injury to his fellows. He claimed an organization was bound by the acts of its members, so if this association is to continue its high professional reputation, the average of its members must continue to be as high as it is. Was it possible for a man who had no definite fee, who would take any fee he could get, five per cent, two and a half per cent when he could get five, and next day take some specific sum of money; was it possible for such a one to be possessed of a high sense of honor that would keep him from interfering with the rights of his neighbor? He doubted it! It seemed to him every man who had a pride in his profession, was endowed with good principles, appreciated his services, and would be willing to say what he considered a fair price for labor should be. Such a man when he has found it, will never depart

from it; never ask more. On the other hand, it seemed to him, a man who has no fixed principle, who will take two and a half per cent from one man and charge the next five per cent, is just to that extent dishonorable. He did not pretend to say that every architect should not regulate his own charges, that a man has no right to make his own prices, but he would say, when he had made them, he was dishonorable if he did not stick to them. Anything the association can do to bring a man to this view, will raise the professional life of that particular man, help him in every way, because it will make him feel what his profession is to the public, and he himself, through his profession. To what individuals can do to improve the association helps the association, and in return they are helped by the association; men need each other's help. He thought it would be to adopt some schedule of prices upon which all could agree, and then voluntarily sign it, and willingly live up to it; in other words, upon their honor. He was of the opinion that the schedule of the Western Association and of the American Institute is little enough for an architect's work if he does it thoroughly. Five per cent was small, he knew of no case where it would be too much. He referred to a conversation he had recently with Mr. Bloor, secretary of the American Institute, in which Mr. Bloor had told him that Mr. Hatfield, of New York City, had informed him his office expenses for the two previous years had been sixty per cent of his income, and the cost of his last year's business was seventy per cent of his gross business. Under these circumstances, five per cent was too little. Here was a man who stood at the head of his profession, certainly in the class of work he does. If he cannot make that amount out of his business, it is because his expenses are too much, and he (Mr. Burnham) could not see how they could be cut down. The probabilities are that they would increase. In his own experience they had increased out of all proportion. Of course, he said, when they were young in the profession and did everything with their own hands, expenses were little, a small office and sometimes a gas bill was about all, then all was mostly profit, but as soon as it became necessary to employ others, expenses were found to increase to sixty and seventy per cent. In plans for a dwelling to cost about \$5,000, five per cent would perhaps, pay some return; but for one to cost \$10,000, it was rarely one got out more than even. The expenses for churches, office buildings, theaters and opera houses reached sixty and seventy per cent. It was no longer a matter of a little pencil detail on a little piece of brown paper. Owners expected architects to make everything. Plans are an important part of his contract, therefore, it must be made a safe contract; therefore, every detail must be made out by the architect. This is what all agree to do, and think it fair business. It is a question of absolute law. In case a contractor wished to do wrong, how could the owner otherwise show it to a court? Under such circumstances fifty per cent is no longer the lowest cost at which an architect can do business in certain classes of work. He cited an instance in the experience of his own office, where a large number of exact copies had to be made, and thousands of manifolds which entailed a necessarily large amount of labor and expense, and from these grounds he argued the desirability of a schedule of established fees, and that they should be lived up to, and that members should on honor, through a clearly defined rule, be kept from interfering with the business of his professional fellows. The worst men fear the association and they should be made to feel that it is their friend, and that they are its friends. The worst that a man can fear by the adoption of a scale of prices, is that he may lose some jobs, but in the end, is it not possible that this plan of self-association from what he does receive, his income will be increased rather than diminished. When a man has reached to this standard, that his fees and his work are equal, the work will come to him, men will hunt him up and he will have enough to do. On the other hand, he held, that however brilliant and capable a man might be, if he was not steady in his charges, charging one man one price, and another man another price for the same services, he never will be known as a reliable party to deal with, and would sooner or later sink to his proper level, losing the confidence and patronage of the public. Individual character makes up the character of the association and in his opinion the whole thing resolves itself into this question of fees. If all would say they believed in a certain schedule of fees and would live up to it, then the association would gain strength and every member of it would gain strength. He asked what risk is there in taking the step now. One man may say his friends would not pay such a price, and if he agreed to abide by it, in that case, some other man who had not, will get the work. The question comes to this, will the members of the association rely on each other? Suppose the members of this association agree to accept no case at less than five per cent, are we willing to trust each other? "Yes," you say, "I'm willing to trust every one of you gentlemen; but it is those on the outside, I have got business now, but if I charge so and so they will get the work." The next question is whether we can make the association so strong that we can go to, say, Mr. Field, and say you ought not to employ any architect outside of the association, every architect that is trustworthy and capable is in the association. If you do go outside for your work, we cannot afford to recognize them by putting ourselves in competition on their level. Suppose the job was given to such outside party in that particular case, and suppose that afterward Mr. Field should learn this fellow had charged someone else less for the same services, do you think the fellow could go on that way long without becoming an outcast? It was his opinion it would not be long before all desirable business, in such a case, would get into honorable hands. It had never been tried. It might be by this association, say Chicago and in Cook county. A paper might be drawn up that all could sign. It might have a proviso that it should take effect at a certain time, and when a certain number had signed it, or when certain men had signed it. It seemed to him this was the proper move in the matter. He would not say the organization had any right to say as an organization that such and such shall be the case; but, if done at all, it might be done voluntarily. For one, he was willing to commit himself, as he believed any schedule of fees would add to the self-respect of every member. If it was done at once, it would cut off the power of such property owners who go about seeking to get architects to bid against each other. If a short trial was made, in his opin-

ion, those who had the highest regard for the profession would be employed the most. In two years the public would come to understand the situation, and it would become a common remark, you can't get the services of Mr. So and So unless you pay him so and so.

W. W. Clay introduced his argument for the negative by saying he fully appreciated the situation of the distinguished gentleman of the negative of the other question, as he had found it necessary to jot down a few arguments. There was this distinction between them. While that gentleman had the advantages of an afternoon in his office, he (Mr. Clay) did his jotting down on his knee, at 3 o'clock in the morning, on a railway train. The subject of compensation for architectural service, said he, while it has little or nothing to do with architecture as a fine art, becomes nevertheless, sooner or later, an interesting topic to those who have permitted themselves to indulge in the luxury of its practice, and indeed when one has so far advanced in this indulgence as to find himself surrounded by a numerous and exacting clientage, the question of how much he will profit financially through a given transaction, resolves itself, if his work be conscientiously and carefully performed, into a question of coming somewhere near even. It might be assumed, therefore, perhaps, that conscientious performance of architectural duty, supplemented by the highest generally recognized compensation, was not likely to result in many millionaires among those of the profession whose object was a financial rather than artistic result. While he did not pretend to have decided in his own mind as to which view of the question would result in the greater advantage and elevation of the profession at large, or those of the association in particular, he was nevertheless convinced to a considerable extent, that it was not desirable for the association to insist that all its members should charge uniform prices. The phraseology of the text of the question seemed to him somewhat unfortunate, as he had difficulty in deciding upon an interpretation which would admit of any treatment in a negative point of view. The first unfortunate feature in a proposition to charge uniform rates, appeared to him to be in the fact that the association had not established any standard of merit, and had not outlined in the slightest degree, what shall constitute an adequate professional service as a basis for any uniformity of charges that might be insisted upon; and indeed, the methods of individuals are so entirely different, the amount of labor actually performed by one so much greater than that performed by another, and the results from, now an artistic, then a practical point of view, so far apart as at times to admit of no comparison whatever, that it would seem unjust to establish a system of charges of such a positive nature as suggested by the text. The practice of architecture, he might say the honorable practice of architecture, at the present day is made possible for so many grades of skill and excellence, by the variety of demands through taste and desire upon the part of those who employ the practitioner, that it would seem a natural consequence for each to find, sooner or later, his professional level, and to receive as a compensation for his services all that he moderately thinks he is worth, or upon the other hand, all that his capacity to do things entitles him to. It was true a certain schedule of prices, such as experience may teach to be fairly remunerative for services performed would be a very reasonable guide for general practice, and he would recommend an early revision of the present schedule, especially in regard to certain classes of intricate and necessarily expensive work. From this advocacy of a new schedule he would not be understood as taking a different position regarding an instance upon the practice of it than taken in previous remarks, but would even add one or two thoughts in disparagement of it. There is no young man starting in professional life, however careful his training or however sufficient his experience who, while he hopes ultimately to obtain the highest position and reward, may not be compelled to make even the most mortifying sacrifices to obtain a foothold, and if the object of the association is the improvement and cultivation of its members, it will surely find as great a field of usefulness in the elevation of the lowest as in the advancement of the highest. In connection with this as an evil, the reliance by young and even old practitioners, which might be still further enhanced by an instance by the association upon uniform rates of compensation, the pernicious practice of upholding them as experts on the witness stand, irrespective of a consideration of the value of the service actually performed in the case at hand, while he was free to admit there were many cases in which the architect is the injured party, the majority of lawsuits brought by architects against clients are for compensation for work not fully completed, and in regard to which there has been no understanding beforehand; while the clients in such a case may be in a measure to blame, it is the reliance of architects—whether they have been accustomed to full compensation or not, but more generally the latter—upon the evidence of architects who have been accustomed to full compensation, which permits them to allow this question to remain unsettled, if necessary, it must be decided in a court room. If he were to frame an obligation it would not be to establish a uniform price, but to insist that each man with the fullest privilege to set his own price, should in each particular case have it distinctly understood in accordance with a given formula which should cover, as nearly as possible, all contingencies which may arise, what that price shall be.

Normand S. Patton said that at the last convention of the Western Association he introduced a resolution declaring it to be the sense of the association that it shall be considered unprofessional conduct for any member to offer to work for less than established fees for the purpose of getting work from another architect. He recognized the right of an architect to make such prices as he chose, but when it came to be a matter between himself and another architect it was quite another thing. If architects are to gain the respect and confidence of the public they must first respect and have confidence in themselves—they should be uniform in their charges, whether large or small. He referred to the practice of some architects making sketches for no compensation in order to get jobs, and thought the practice should be condemned—that some charge, say three or four per cent, ought to be made for that character of work, and he believed the public would sustain it.

Mr. Burnham, stated that within the last year several of the leading men of the city had approached him and spoken about the insufficiency of

charges for plans for good dwelling houses. One Mr. ——— said to him "Why don't you ask enough for good dwellings, over and above your usual fees, so you can afford to put good men on the work?" He remarked that this was indicative of the public feeling.

W. W. Boyington saw no possible way of making a schedule of fees that would be generally applicable, because every building varies somewhat, and calls for work peculiar to itself. It was his opinion, from what Mr. Bloor had said, that the intent and the purpose of the American Institute, in saying five per cent, meant that it was the smallest per cent an architect should take. In New York ten per cent for dwellings was of practice. It is only a question, he considered, of standing together in this matter.

O. J. Pierce said there could be no doubt in the minds of every professional architect, but that five per cent is much too little, but at the same time the schedule of the American Institute and Western Association has fixed five per cent, and the public have come to understand that is the price. The trouble is not among the architects, but with their clients. It might be proposed to them that five per cent is not enough, but they would answer, there are any amount of architects, who are willing to do the work for less. He found himself so handicapped. By having a schedule that could be adopted with some conscience, we could say, this is the established price and I cannot do otherwise than stand by it and maintain my professional standing.

Mr. Clay thought there was a difficulty in the proposition of Mr. Boyington for a recognition of it in a schedule of prices by fixing maximums. They should all agree to endeavor to impress the public, that the five per cent, which was known and acknowledged by legal decision, is but the minimum of charges, and he thought it could be so worded in the schedule.

After considerable further discussion by Messrs. Burnham, Sullivan, Baumann and Boyington, Mr. Baumann stated he did not expect that any action would be taken at that time by the association, but he suggested that the subject be referred to the Executive Committee as being the sense of the association, that five per cent be considered the minimum price for full professional services, the committee to report, when, in its wisdom, is the proper time, the same, for final action, and in what form.

Mr. Sullivan suggested that the subject be referred to the Executive Committee, with the instruction that it is the sense of the association, that the question of uniform charges is considered a vital one, and the committee is requested to give the matter their earnest attention, and report such a plan as in their judgment will best effect the sense of the association.

The subject was so referred, and the meeting went into executive session.

Western New York State Association of Architects.

In answer to a call issued by the Buffalo Society of Architects, to the architects of western New York, a convention of architects assembled at the Powers Hotel, Rochester, October 29, 1887.

The meeting was called to order by W. W. Carlin, of Buffalo, who nominated Louis P. Rodgers, of Rochester, as temporary chairman, R. C. McLean, editor of the INLAND ARCHITECT, of Chicago, temporary secretary. Mr. Rodgers took the chair and called upon Mr. Carlin to explain the purposes of the meeting. Mr. Carlin read the following circular letter, which was issued by the Buffalo Society:

BUFFALO SOCIETY OF ARCHITECTS.
SECRETARY'S OFFICE, 57 CHAPIN BLOCK.
BUFFALO, N. Y., March 2, 1887.

The undersigned committee has been appointed by the society to correspond with the architects of New York, regarding a convention to form a state architectural association.

Although our society has been organized less than one year, we think every member has been benefited by the more intimate acquaintance, and interchange of ideas; but we feel the need of a more extended organization, to enable us to deal with those questions of legislation which must sooner or later be brought before the profession.

We would respectfully solicit your opinion of the subject, both with regard to the time and place of meeting, should one be called, and the general character and scope of the organization.

Awaiting your early reply, we subscribe,

LOUISE BETHUNE,
CHARLES R. PERCIVAL, } Committee.
W. W. CARLIN,

Answers were received from a number of architects in Rochester, Syracuse, Elmira, Fredonia and other points, and, October 22, 1887, a circular was sent to about thirty architects of Buffalo, Syracuse, Rochester, Elmira, Utica and Fredonia, which was as follows:

It has been decided to call a convention at the Powers Hotel, Rochester, Saturday, October 29, at 11 o'clock A.M., for the purpose of organizing an association of architects for western New York. It is proposed to take in all reputable architects as far east as Syracuse, according to the definition of an architect given by the Western Association.

Should you have among your acquaintances such a person, who has not been reached by these circulars, please invite him for the committee to present himself at that time.

It is expected that several prominent architects from outside of the state will be present, and that the meeting will be both pleasant and profitable to all concerned.

It is earnestly desired that as large a representation as possible be present, and to this end would urge upon you the desirability of arranging your engagements for the week to enable you to be present Saturday. Hoping to meet you at the convention, we remain, very truly yours,

THE COMMITTEE. Per W. W. Carlin, Sec'y.

A motion was made by W. C. Walker, that a committee of two be appointed to wait upon Messrs. Warner and Brockett, architects, to invite them to the meeting. W. C. Walker and Otto Block were appointed as this committee.

Upon motion of C. K. Porter, of Buffalo, the roll was then signed by the following architects:

Otto Block, J. R. Church, James G. Cutler, Charles F. Crandall, O. W. Dryer, Jay Fay, Orlando K. Foote, W. Foster Kelly, Thomas Nolan, W. H. Richardson, Louis P. Rodgers and W. C. Walker, of Rochester.

Geo. W. Baxter, Jr., E. M. Buell, C. E. Colton, Ellis G. Hall, J. H. Kirby and Asa L. Merrick, of Syracuse.

Louise Bethune, R. A. Bethune, W. W. Carlin, C. R. Percival and Cyrus K. Porter, of Buffalo.

J. Q. Ingham and J. H. Pierce, of Elmira.

E. A. Curtis, of Fredonia.

The following names were added by resolution:

Geo. T. Otis, of Rochester; H. L. Campbell, Edward A. Kent and Jesse R. Porter, of Buffalo, and Otis Dockstader, of Elmira.

Mr. Porter moved that this roll be considered as the report of a committee on credentials, and that the convention proceed to form an association of architects. After considerable discussion this motion was carried, and the temporary officers were made the permanent chairman and secretary of the convention.

C. E. Colton, of Syracuse, moved that a committee of five be appointed by the chair on permanent organization, to report after recess. Carried.

The chair appointed as such committee, J. G. Cutler, of Rochester; W. W. Carlin, of Buffalo; C. E. Colton, of Syracuse; J. Q. Ingham, of Elmira, and E. A. Curtis, of Fredonia. On motion by Mr. Cutler the secretary was added to the committee.

Mr. Foote's motion that W. F. Kelly and O. W. Dryer, of Rochester, be added to the roll of membership, was carried. Messrs. Kelly and Dryer being present signed the roll.

The session then adjourned to meet at 1:30 o'clock.

The meeting was again called to order about two o'clock by Chairman Rodgers. The secretary reported a draft of Constitution and By-Laws, which were read and amended, section by section, and adopted as a whole as follows:

CONSTITUTION.

NAME.

ARTICLE I. The name of this organization shall be the Western New York State Association of Architects.

OBJECT.

ART. II. The objects of the Association are to unite in fellowship the architects of western New York, to combine their efforts, to promote the artistic, scientific and practical efficiency of the profession, and to cultivate and encourage the study of kindred arts.

MEMBERSHIP.

ART. III. This Association shall consist of active and honorary members.

QUALIFICATIONS.

ART. IV. The active members of this Association shall be practicing architects, residing in the state of New York.

Honorary members of this Association may be elected, upon the recommendation of the Executive Committee. They shall not be entitled to vote, nor be eligible to office, nor shall they be assessed for dues or admission fee. Practicing architects may not be honorary members.

OFFICERS.

ART. V. The officers of this Association shall be a president, secretary, treasurer and two vice-presidents.

PRESIDENT.

ART. VI. It shall be the duty of the president to preside at the meetings of the Association, but in his absence the senior vice-president present shall preside.

SECRETARY.

ART. VII. It shall be the duty of the secretary to take the minutes of the meetings, and to conduct the correspondence of the Association, subject to the direction of the Executive Committee.

TREASURER.

ART. VIII. It shall be the duty of the treasurer to collect all funds, and disburse the same on the order of the secretary, when countersigned by the chairman of the Executive Committee.

AMENDMENTS.

ART. IX. This Constitution may be amended by a two-thirds vote of the active members present at any regular meeting. A copy of the proposed amendment, indorsed by three active members, having been mailed by the secretary to each member, thirty days previous to the regular meeting.

STATUS OF AN ARCHITECT.

ART. X. The status of an architect is hereby defined as follows, to wit: An architect is a professional person whose sole ostensible occupation consists in supplying data preliminary to the material construction and completion of buildings, in exercising administrative control over the operations of contractors supplying material and labor incident to the construction and completion of buildings, and in officiating as custodian and arbitrator of contracts, stipulating terms of obligations and fulfillment between proprietor and contractor.

FAILURE TO PAY DUES.

ART. XI. Should any member fail for one year to pay his dues, the Executive Committee may, at its discretion, drop his name from the roll. Should charges of misconduct be preferred against any member, it must be done in writing, and be signed by the person making such charge; whereupon the Executive Committee, at its next meeting, must take the matter up, and the said committee may, at its discretion, drop the name from the roll, and the decision of the committee shall be final and absolute. The member against whom the charges are made shall, however, have the right to be heard in his own defense.

EXECUTIVE COMMITTEE EXPENSES.

ART. XII. Members of the Executive Committee summoned by the chairman to attend special meetings at points distant from their homes, shall have their actual traveling expenses and hotel bills defrayed by the Association.

BY-LAWS.

SECTION 1. The meetings of this Association shall occur on the second Tuesdays of October, February and June in each year. No two meetings shall be held in the same city consecutively.

The October meeting shall be the annual meeting.

SEC. 2. The meetings of this Association shall be conducted in accordance with "Robert's Rules of Order."

SEC. 3. The Executive Committee shall consist of the president, secretary and treasurer, and two active members, who shall have the care of the property and the management and general welfare of this Association, and shall report at each regular meeting.

SEC. 4. The officers, including the Executive Committee, shall be elected by the majority ballot vote of the members present at the annual meetings of this Association.

SEC. 5. The papers, books and other records shall, at all times, be open to the inspection of the members of this Association.

SEC. 6. The active members of this Association shall pay an admission fee of five dollars, and annual dues of five dollars. Annual dues shall be payable in advance.

SEC. 7. All applicants for membership in this Association shall be referred to the Executive Committee, who shall investigate their standing, and if found worthy, recommend them for election at the next meeting.

SEC. 8. All applications for membership recommended by the Executive Committee are to be voted upon by ballot, and five ballots cast against any such applicant will be sufficient for his rejection.

SEC. 9. All names of applicants are to be presented to the Executive Committee, accompanied by the indorsement of two active members.

SEC. 10. Fifteen active members shall constitute a quorum for the transaction of business.

SEC. 11. The By-Laws of this Association may be amended at any regular meeting by a two-thirds vote of the active members present.

J. G. Cutler, of Rochester, moved that the admission fee of charter members of the Association be remitted; amended by W. W. Carlin, of

Buffalo, that all members admitted before the close of the next regular meeting be considered as charter members; motion, as amended, was carried.

Mr. Carlin moved that two nominating committees, of three each, be appointed by the chair.

The chair appointed, as one committee, Asa L. Merrick, of Syracuse; C. F. Crandall, of Rochester, and Louise Bethune, of Buffalo.

The chair appointed as the other committee, J. Q. Ingham, of Elmira, J. H. Kirby, of Syracuse, and Orlando K. Foote, of Rochester. These committees retired for consultation.

Mr. Carlin moved that when this meeting adjourn, it shall be to meet the second Tuesday in February, 1888, at Syracuse, N. Y. Motion was carried.

Mr. J. Q. Ingham, of Elmira, the chairman of one nominating committee, reported a ticket as follows: for president, Mr. J. G. Cutler, of Rochester; for secretary, Mr. W. W. Carlin, of Buffalo; for treasurer, Mr. C. E. Colton, of Syracuse; for first vice-president, Cyrus K. Porter, of Buffalo; for second vice-president, Mr. E. A. Curtis, of Fredonia; for executive committee, Mr. Thomas Nolan, of Rochester, and Mr. A. L. Merrick, of Syracuse.

Mr. Asa L. Merrick, chairman of the other committee, reported for president, Mr. J. G. Cutler, of Rochester; for secretary, Mr. O. K. Foote, of Rochester; for Treasurer, Mr. C. E. Colton, of Syracuse; for first vice-president, J. Q. Ingham, of Elmira; for second vice-president, J. H. Pierce, of Elmira; for executive committee, Mr. W. W. Carlin, of Buffalo, and Mr. Louis P. Rodgers, of Rochester.

Mr. J. R. Church and Mr. C. F. Crandall were appointed tellers.

As both tickets were headed by the same candidate for president, by unanimous vote the secretary was instructed to cast one ballot for Mr. J. G. Cutler, of Rochester, who was declared duly elected.

For secretary, Mr. W. W. Carlin received eighteen votes, Mr. Orlando K. Foote, five votes. Mr. Carlin was declared elected secretary.

For first vice-president, Mr. C. K. Porter, of Buffalo, received seventeen votes, Mr. J. Q. Ingham seven votes. Mr. Porter was declared elected first vice-president.

For second vice-president, Mr. E. A. Curtis, of Fredonia, received fourteen votes, Mr. J. H. Pierce, nine votes. Mr. Curtis was declared elected second vice-president.

As Mr. C. E. Colton, of Syracuse, was nominated for treasurer on both tickets, the secretary was instructed, by unanimous vote, to cast one ballot for Mr. Colton, who was declared elected treasurer.

Mr. Nolan, of Rochester, who was nominated on the executive committee, explained that he would be absent in Europe for the coming year, and asked that someone else be placed in nomination.

Mr. J. H. Pierce, of Elmira, and Mr. L. P. Rodgers, of Rochester, were elected members of the executive committee.

Mr. Porter and Mr. Carlin were appointed a committee to conduct President Cutler to the chair, and Mr. Cutler, in a neat and brief speech, thanked the Association for the honor conferred.

Votes of thanks were passed to Chairman Rodgers and to Secretary McLean for their services, and to the Buffalo Society of Architects for the great labor expended, and the efficient manner in which the convention and organization was brought about.

Upon motion of Mrs. Louise Bethune, of Buffalo, Mr. R. C. McLean, editor of the INLAND ARCHITECT, of Chicago, was unanimously elected an honorary member of the association. Mr. McLean briefly thanked the convention for the honor conferred.

On motion of Mr. Ingham, the executive committee was ordered to print the Constitution and By-Laws, and send from five to eight copies to each member.

Mr. Cyrus K. Porter, of Buffalo, offered the following resolution:

Resolved, That the secretary be instructed to send a list of the charter members of this Association to the secretary of the Western Association of Architects, with formal notification of the formation of the Western New York State Association of Architects, under the rules of the Western Association of Architects.

Mr. Colton, in a brief speech, extended to the convention the promise of a hearty welcome to Syracuse, and urged upon each member the importance of attending the February meeting.

The convention then adjourned, to meet at Syracuse on the second Tuesday of February, 1888.

Our Illustrations.

Standard Club House, Chicago; Adler & Sullivan, architects.

St. Louis Hotel, Duluth, Minn.; Burnham & Root, architects, Chicago.

Stations for the Chicago & North-Western Railway Company; Cobb & Frost, architects, Chicago.

Chicago Telephone building; J. L. Silsbee, architect, Chicago.

Residence for T. S. Fauntleroy, Kenwood, Ill.; Treat & Foltz, architects, Chicago.

PHOTOGRAPHURE PLATES.

(issued only to subscribers for the Photographure edition.)

Residence for Franklin MacVeagh, Chicago; H. H. Richardson, architect.

Residence for Lambert Tree, Chicago; Peabody & Stearns, architects, Boston, Mass.

Residence for Mr. Murphy, Detroit, Mich.; Wm. Scott & Co., architects.

Old colonial residence, Cincinnati, O.; Benjamin Henry Latrobe, architect.

The Lincoln Memorial, Lincoln Park, Chicago; statuary by Augustus St. Gaudens, sculptor; architectural part by Stanford White, architect, New York.

Association Notes.

ARCHITECTURAL LEAGUE.

At the last meeting of the Architectural League it was decided to select a jury of five for the exhibition to be opened December 19, three of whom were to be non-members of the League. The following jury was selected: Architects Richard M. Hunt, Charles McKim and Edward H. Kendall; Augustus St. Gaudens, the sculptor, and Clarence Luce. The two last named are the League members.

THE BUFFALO SOCIETY OF ARCHITECTS.

The Buffalo Society of Architects held its annual meeting, October 10. The principal business of the meeting was the consideration of the report of the committee appointed to arrange for the organization of a state association. The committee reported that arrangements had been completed and it was decided to call a convention, to be held at Rochester, October 29.

Officers for the ensuing year were elected, as follows: President, Cyrus K. Porter; first vice-president, Louise Bethune; second vice-president, Charles R. Percival; secretary, W. W. Carlin; treasurer, R. A. Bethune.

BUFFALO ARCHITECTURAL SKETCH CLUB.

The Sketch Club is in a flourishing condition and is doing good work. The work is arranged under three headings, æsthetic, scientific, and practical. An instructor is appointed for each, who chooses the subject to be discussed, and conducts the discussion and investigation until it is finished, when another instructor is elected, and another subject chosen. Instructors are elected for six meetings and some phase of the subject is discussed at each meeting.

CHICAGO ARCHITECTURAL SKETCH CLUB.

The annual meeting of the club was held November 6, with a full representation of members, sixty-five being present. The reports of the Executive Committee and of the Treasurer showed that while during the past year the club had lost a large number of its members through their removal to other cities, the permanent position and high grade of excellence attained in previous years had not been materially impaired.

President Beaumont in his annual address spoke of the work of the past year and the future of the club, calling for increased activity and zeal, especially from junior members.

Treasurer C. W. Trowbridge reported that he had the names of forty-nine members on the list. He had \$119.88 in the treasury, and there was due the club \$157, \$59 of which belonged to the special assessment fund for the banquet.

There was some discussion in relation to the members who are in arrears for dues, and a motion was made and carried to the effect that all who are in arrears be requested to pay their dues to the treasurer by November or their names would be taken off the list of members.

Secretary W. G. Williamson read his report. He stated that the attendance was not up to the average of last year. It had been suggested that permanent quarters should be secured for the club, and he recommended that some such action should be taken.

The following officers were then elected for the ensuing year:

Mr. George Beaumont was reelected president.

Messrs. C. A. Kessell and W. B. Mundie, first and second vice-presidents.

Mr. W. G. Williamson, who has faithfully served as secretary of the club since its organization, was reelected secretary.

Mr. E. J. Wagner, was elected treasurer.

The following gentlemen compose the executive committee: President, George Beaumont; first vice-president, C. A. Kessell; second vice-president, W. B. Mundie; secretary, W. G. Williamson; treasurer, E. J. Wagner, O. C. Christian and T. O. Fraenkel.

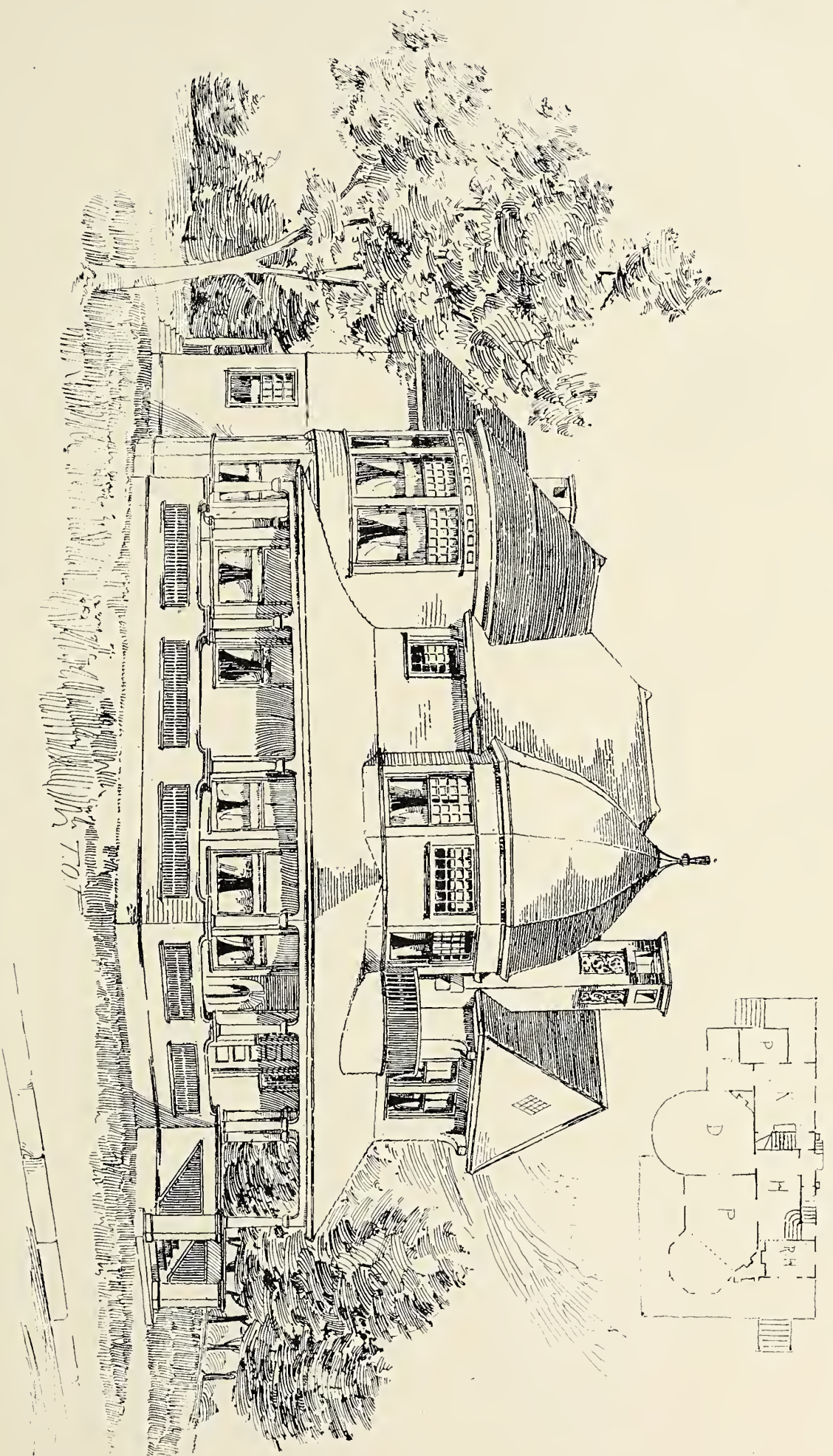
The annual club banquet and exhibit of drawings was announced for November 14, and the meeting adjourned.

Mosaics.

MILEAGE TICKETS AT TWO CENTS.—The Chicago & Grand Trunk and Detroit, Grand Haven & Milwaukee railway agents have just been instructed to issue to all who apply for thousand-mile tickets, limited one year from date of issue, good for the one person named on the ticket, at two cents per mile, or \$20 per ticket. These tickets are good on the line of the Chicago & Grand Trunk and Detroit, Grand Haven & Milwaukee Railway Company's steamers between Grand Haven and Milwaukee, the Michigan Air Line and Detroit Division of the Grand Trunk, and the Great Western Division of the Grand Trunk between Port Huron and Niagara Falls, and between Detroit and Niagara Falls, and on the line of the New York, Lake Erie & Western Railway between Niagara Falls and Buffalo in either direction.

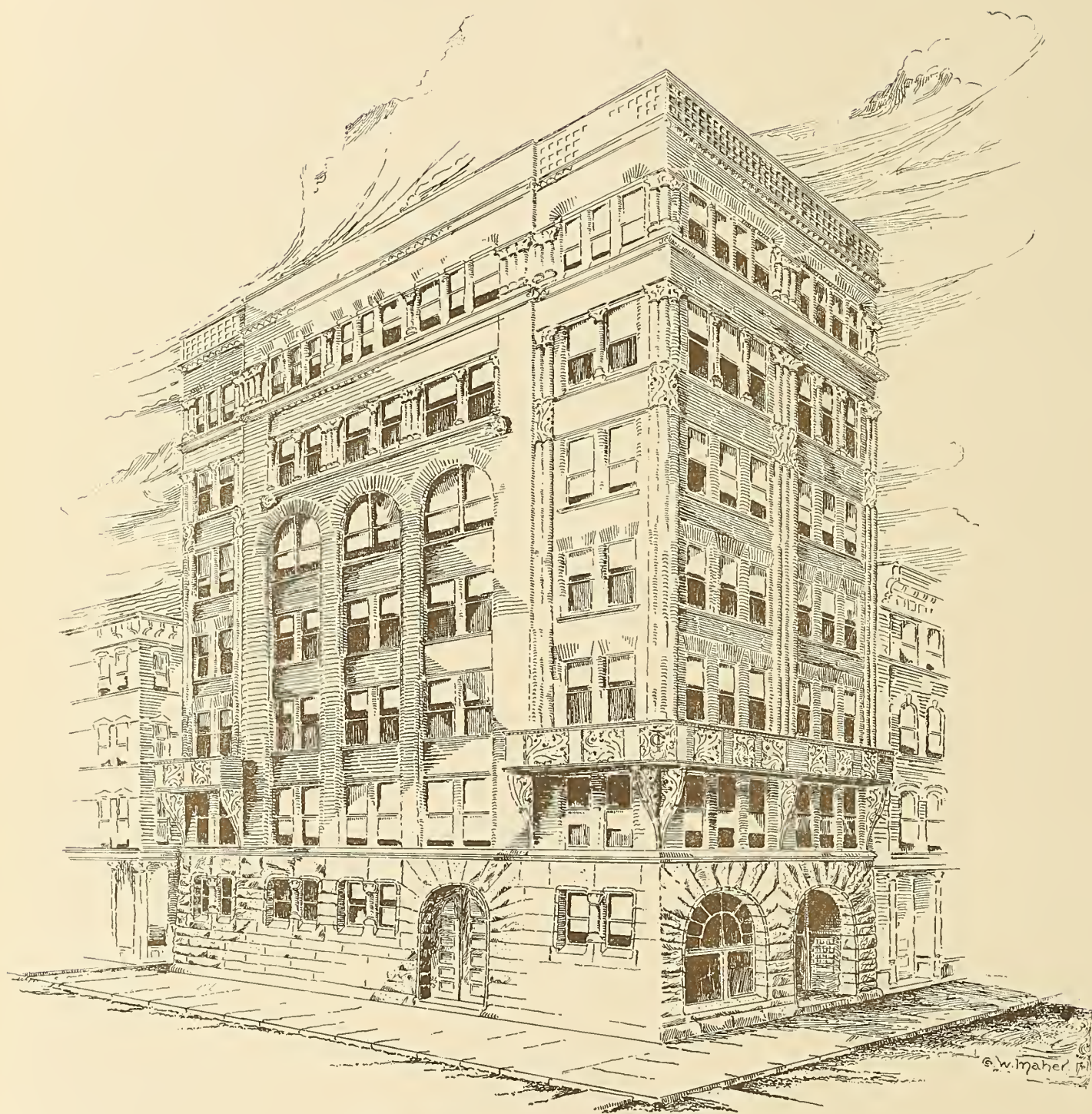
THE next convention of the Western Association of Architects will be held in Cincinnati, on Wednesday, November 16.

A special rate of \$11.80 from Chicago to Cincinnati and return has been obtained. In order to secure this rate, it was necessary to guarantee that 15 or more persons would go on one date, and via the same line. The MONON ROUTE, L., N. A. & C. R'y, has been selected as the line to be used by the members and their friends from Chicago and the Northwest. This line runs double daily trains; morning train leaves Chicago from Dearborn Station, corner Fourth Avenue and Polk street, at 8:15 A.M., arriving Cincinnati 7:35 P.M.; evening train leaves 8:05 P.M., arriving Cincinnati 7:55 A.M. Day train consists of palace chair cars and through coaches, and night train carries Pullman buffet sleepers and through coaches. The charge for seat in the chair car on day trains is 75 cents, for double berth in the Pullman sleeper on night train is \$2.00, section \$4.00; berth will accommodate two people, section four people. Members expecting to attend and desiring seats in the chair car on day train or berths in the sleeper on night train, will please notify the secretary by November 14, and same will be secured by him. Special accommodation will be provided for ladies, and it is to be hoped that the delegates and their friends will bring the lady members of their families.



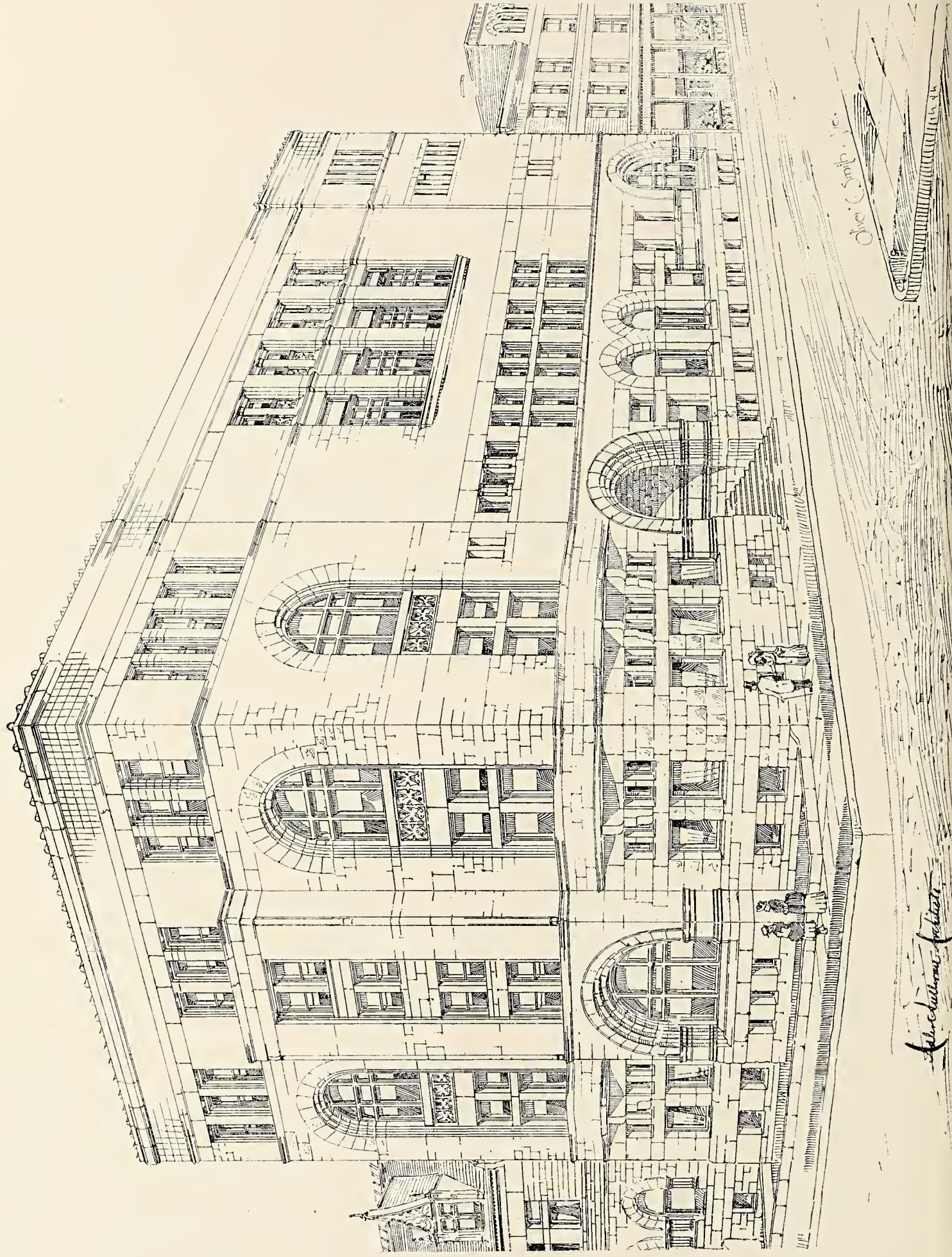
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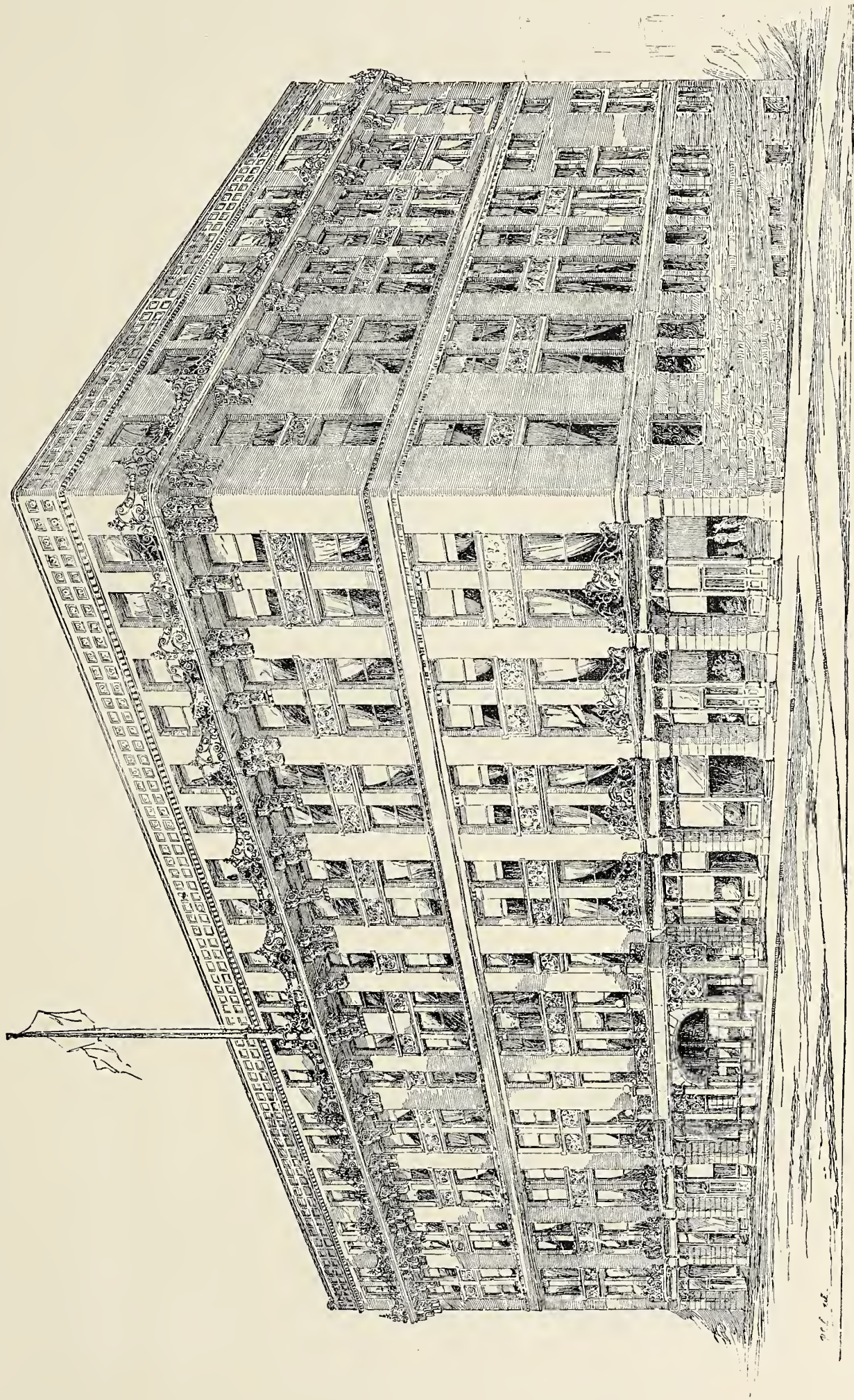
CORB & FROST, ARCHITECTS, CHICAGO.



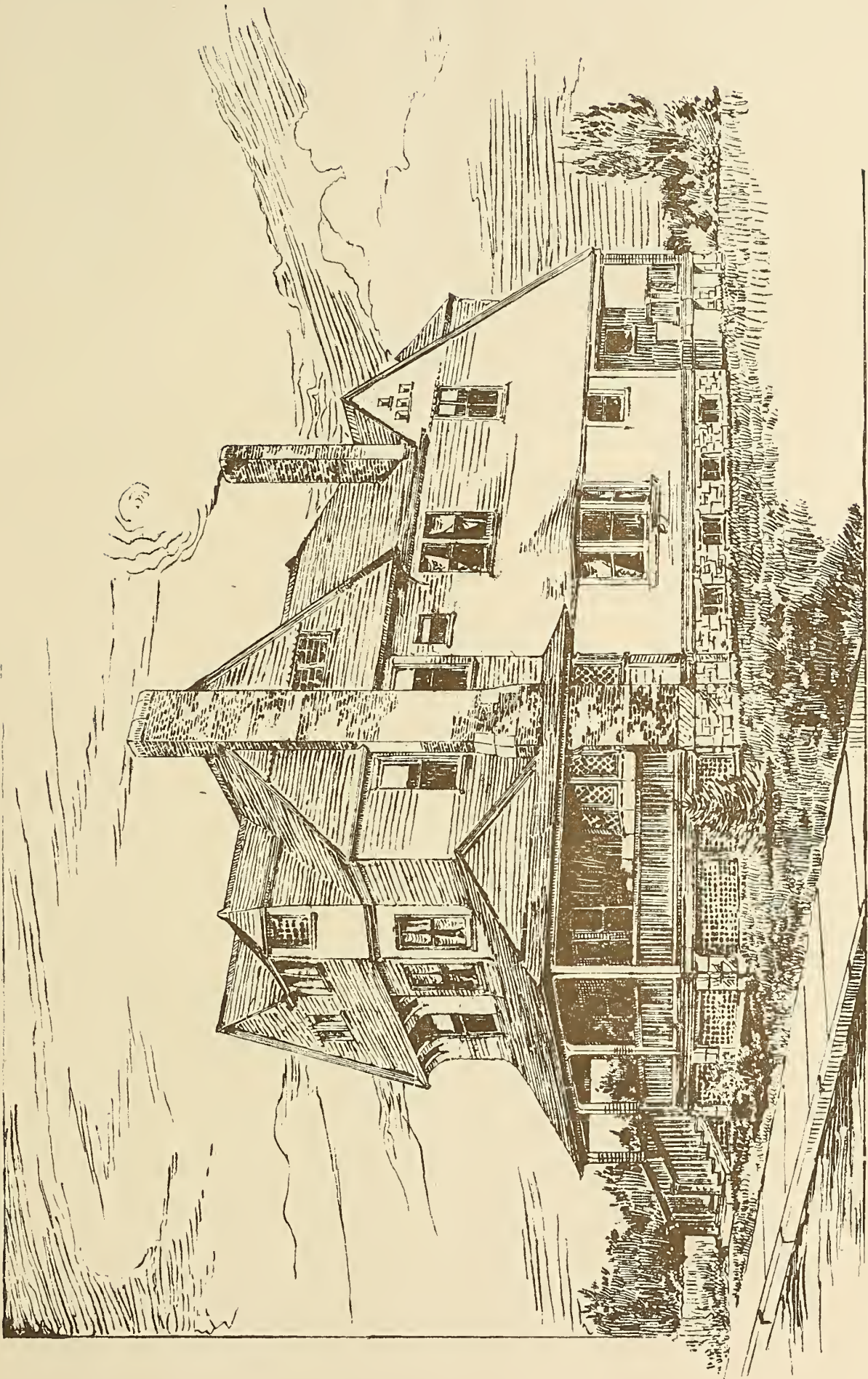
Chicago Telephone Building.

J. L. Silsbee Archt.
Chicago.



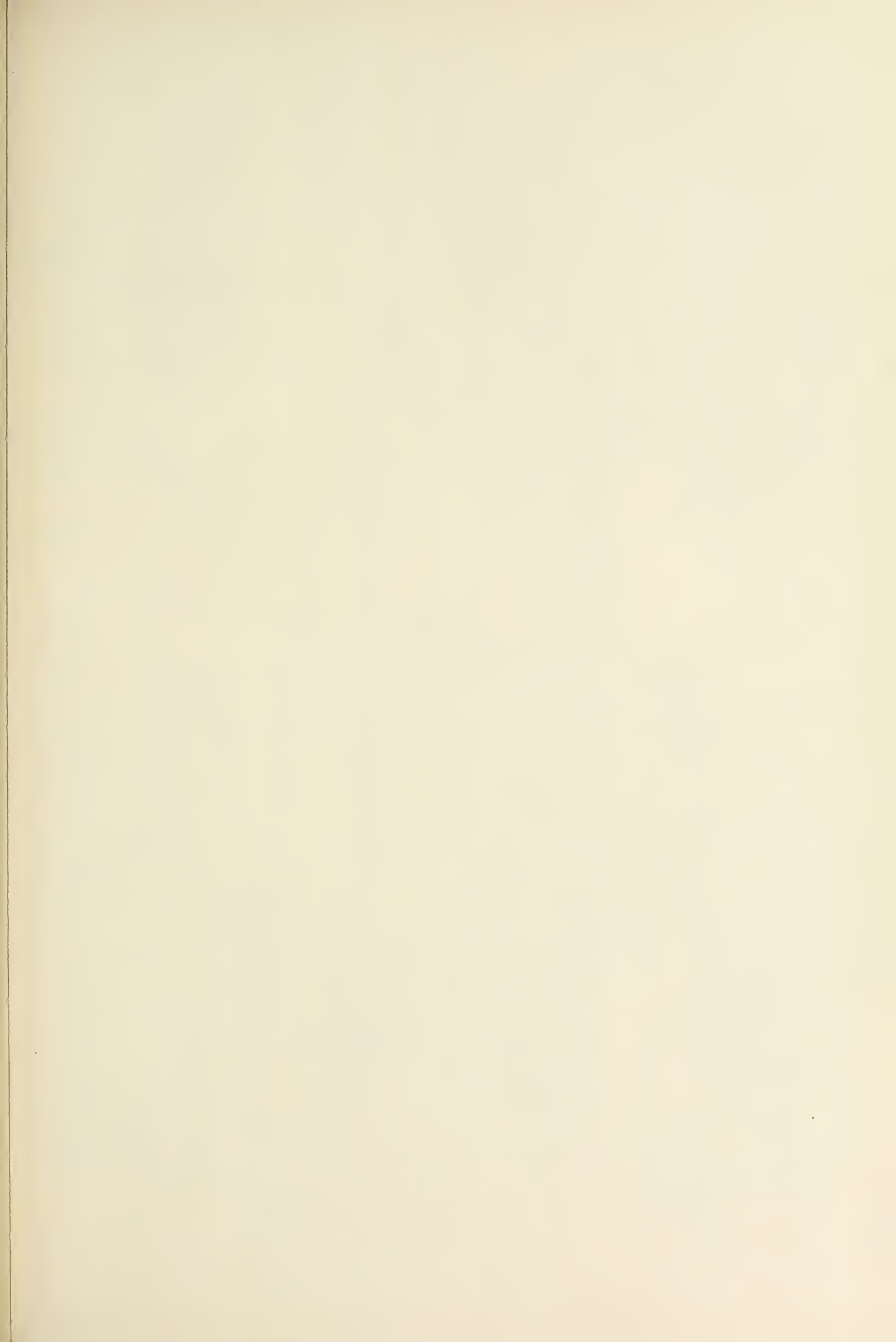


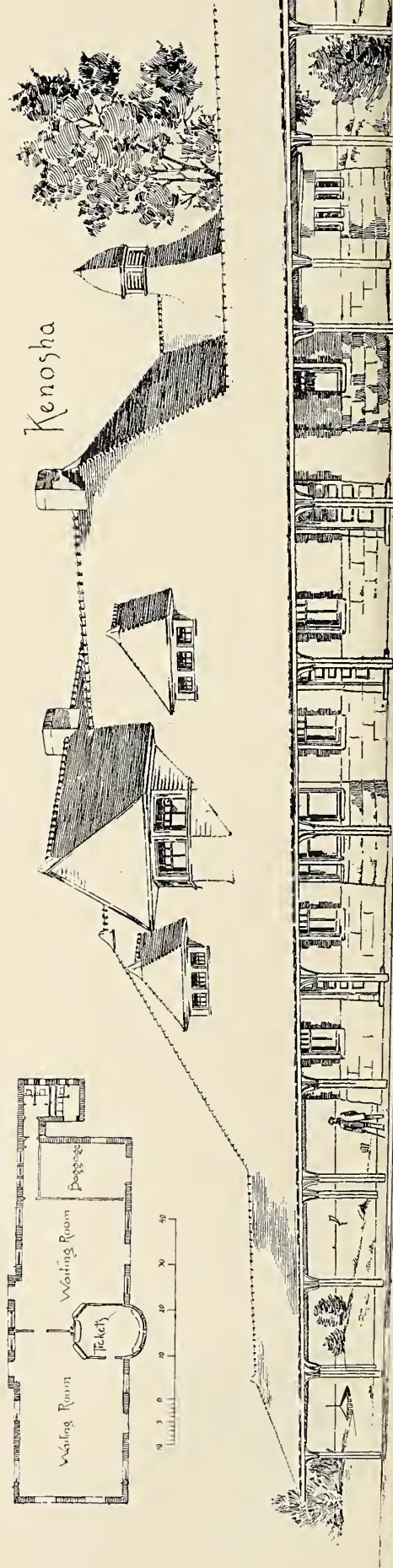
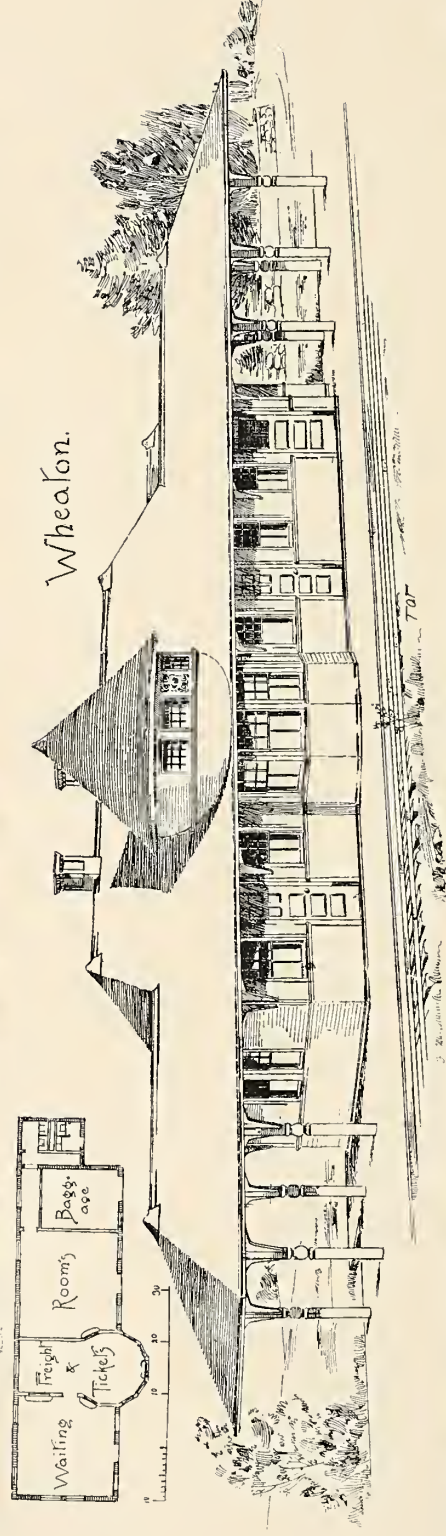
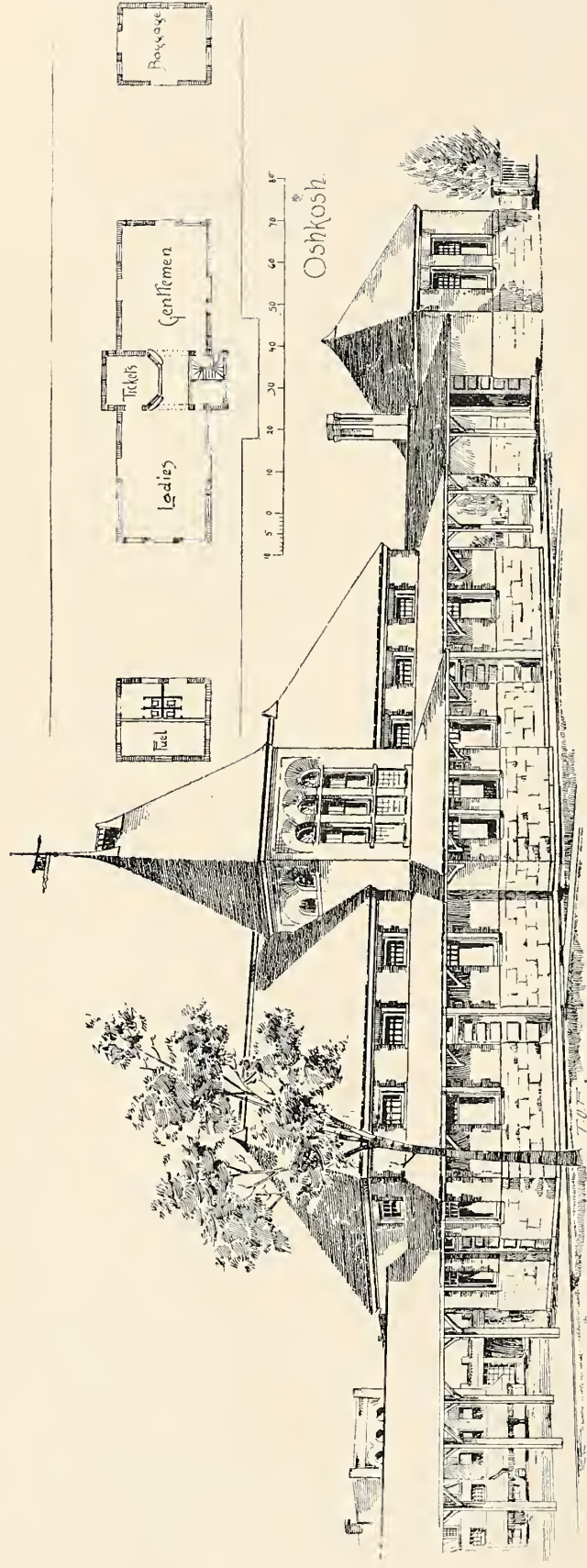
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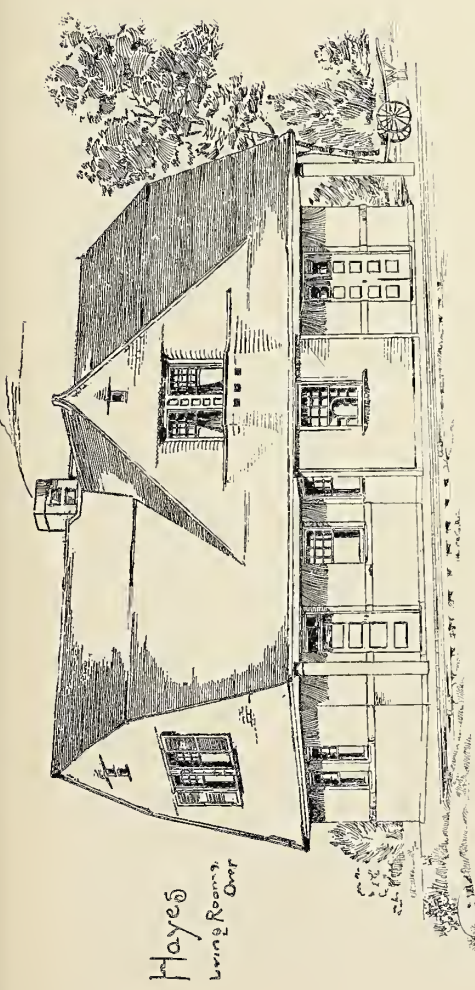


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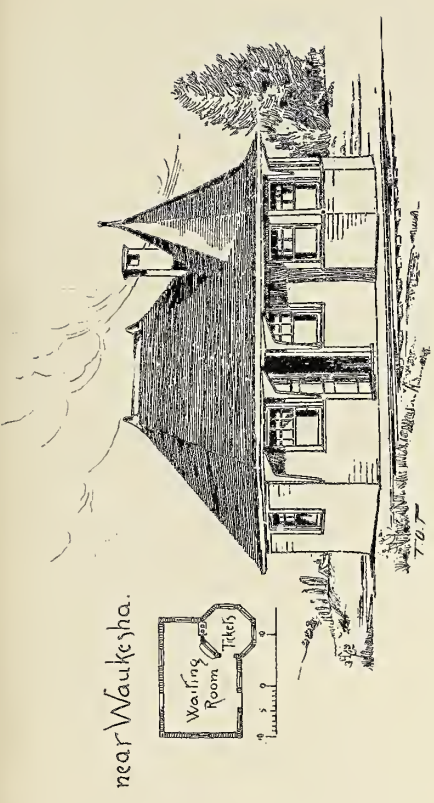
TREAT & FOLTZ, ARCHITECTS, CHICAGO.



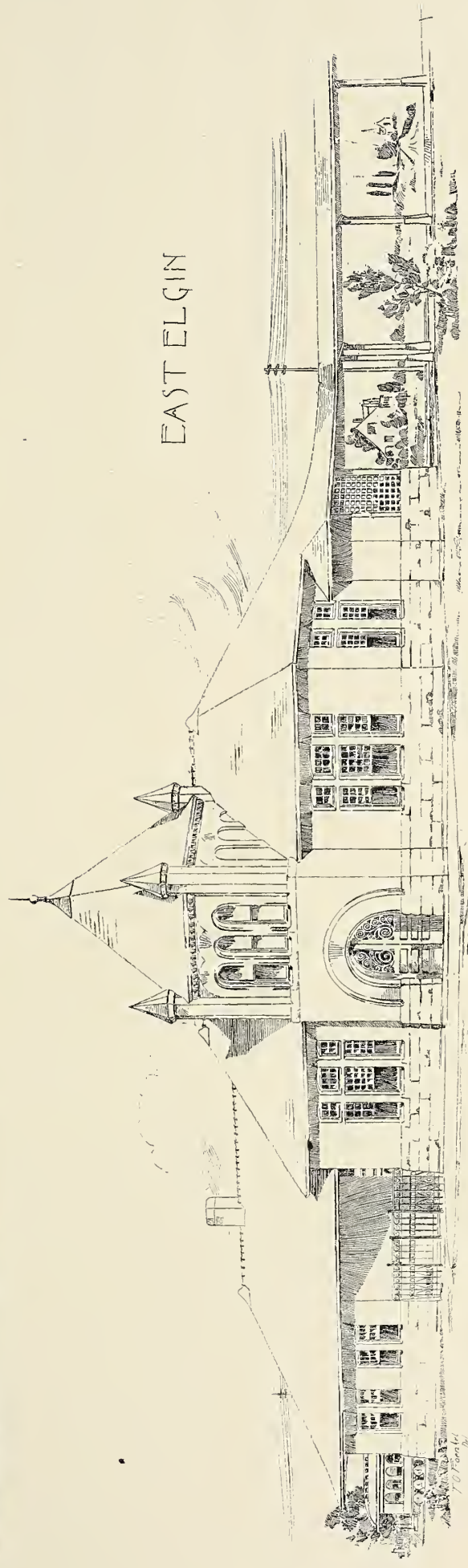




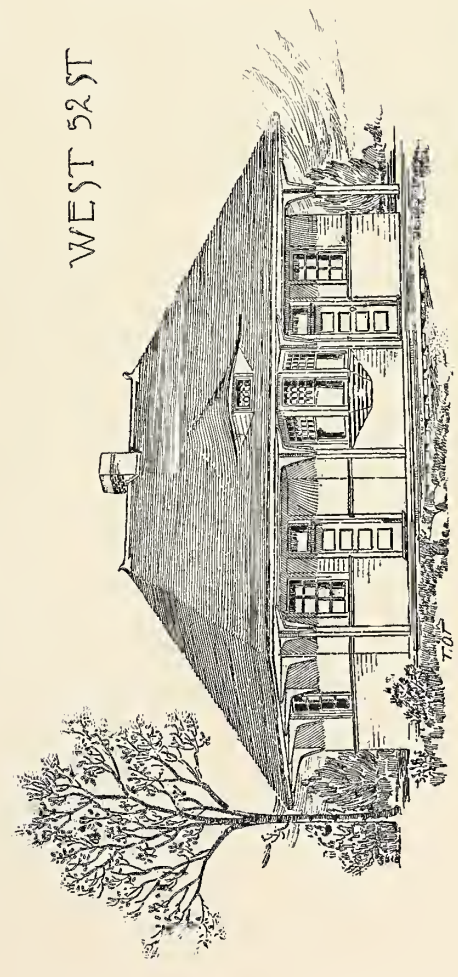
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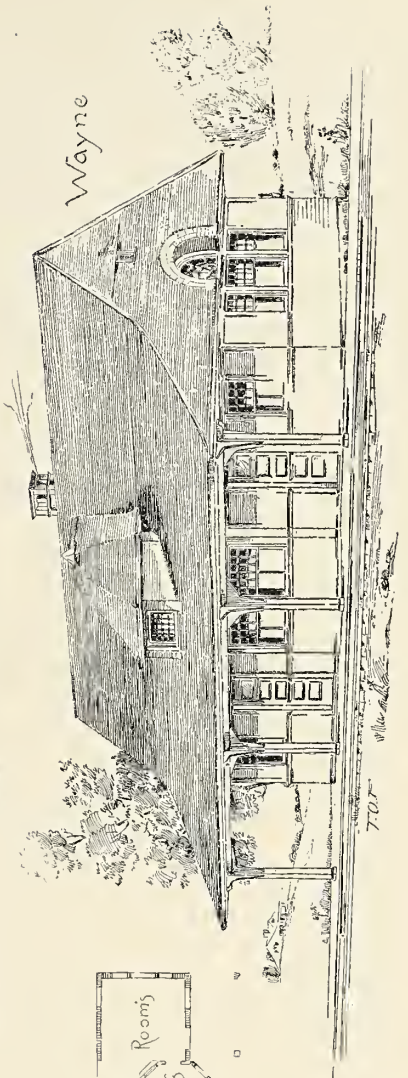
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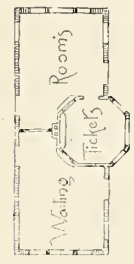
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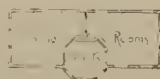
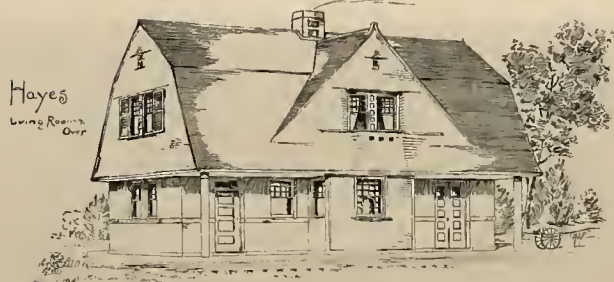
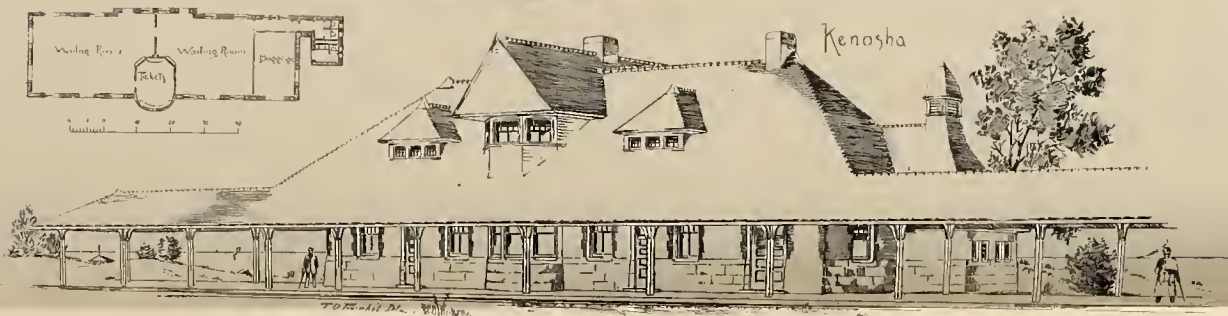


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Wayne





DECEMBER, 1887.

THE INLAND ARCHITECT
AND NEWS RECORD.

A Monthly Journal (with an Intermediate News Number) Devoted to

ARCHITECTURE,

Construction, Decoration and Furnishing

IN THE WEST.

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Committee on Metric System—T. B. Annan, St. Louis, chairman; N. S. Patton, Chicago; Charles Crapsey, Cincinnati.
Committee on Uniform Contracts and Specifications—The executive boards of the several state associations to report at the next session of the Western Association.
Committee on Raising the Standard of Professional Requirements for membership—Special sub-committee of three in each state.—L. H. Sullivan, Chicago, chairman.
Committee on Procuring Architectural Drawings and Photographs for Exhibition at the next Convention of the Western Association—The Board of Directors of the Western Association.
Committee on Collection of Statistics on Competitions—C. E. Illsley, St. Louis, Mo.; G. W. Field, Omaha, Neb.; E. H. Taylor, Cedar Rapids, Iowa; G. W. Rapp, Cincinnati, Ohio; J. W. Yost, Columbus, Ohio.
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Committee to Collect Legal Decisions Relating to Building Interests—Missouri: Chas. C. Helmers, Jr., St. Louis; Adriaene Van Brunt, Kansas City; T. B. Annan, St. Louis. Kentucky: C. A. Curtin, Louisville; H. P. McDonald, Louisville; Mason Maury, Louisville. Tennessee: Wm. C. Smith, Nashville; James F. Baumann, Knoxville; Chas. C. Burk, Memphis. Minnesota: F. G. Corser, Minneapolis; G. M. Godwin, Minneapolis; D. W. Millard, St. Paul. Texas: S. A. J. Preston, Austin; James J. Kane, Fort Worth; N. J. Clayton, Galveston. Nebraska: G. L. Fisher, Omaha; Geo. W. Field, Omaha; Louis L. Mendelshon, Omaha. Michigan: John M. Donaldson, Detroit; Dillon P. Clark, West Bay City; Jack Rice, Detroit. Illinois: Fred Baumann, Chicago; R. C. Berlin, Chicago; Wm. Holabird, Chicago. Indiana: B. Vonnegut, Indianapolis; J. W. Reed, Evansville; J. F. Wing, Fort Wayne. Ohio: J. W. Yost, Columbus; E. O. Fallis, Toledo; S. E. Des Jardins, Cincinnati. Kansas: J. G. Haskell, Topeka; E. T. Carr, Leavenworth; A. W. Haywood, Wichita. Wisconsin: Geo. B. Ferry, Milwaukee; H. C. Class, Milwaukee; W. A. Holbrook, Milwaukee. Iowa: E. H. Taylor, Cedar Rapids; F. D. Hyde, Dubuque; E. S. Hammett, Davenport. Georgia: F. W. Bruce, Atlanta; A. McMurphy, Augusta; F. C. Morgan, Atlanta. New York: W. C. Crall, Buffalo; Louise Bethune, Buffalo; J. G. Cuder, Rochester. Dakota: Albert E. Cobby, Yankton. California: Eugene L. Calkins, Los Angeles. Louisiana: Thomas Sully, New Orleans.

THE fourth annual convention of the Western Association of Architects was held at the Grand Hotel, Cincinnati, Ohio, November 16 and 17. While the attendance did not aggregate more than one-fifth of the membership, the representation was general, and the work of the year showed a life and activity among the members that augurs well for the future of the association. No stronger evidence of the rapid growth and influence of this society can be found than in the fact that the names of eighty applicants for membership were presented by the board of directors and admitted to fellowship. A peculiarity of this convention was the absence of papers upon technical subjects, the committee work of the year being so extensive that the board of directors deemed it advisable to dispense with a feature that, while enjoyable and instructive to the members, entails considerable work upon those appointed to prepare them. The address of President Root was brief but full of thoughts pertinent to the occasion, commending the past and encouraging future action. He spoke of the necessity for a true democracy and the need of close personal intimacy between members, that misunderstandings might be few and the code of ethics lived up to by each of the members. Mr. Root's appeal for a thoughtful and studied architecture rather than forms that are the expression of a caprice, was especially pertinent. Among the principal committee reports were those upon statutory revision, standard of professional requirement, the bill governing the office of supervising architect, on legal decisions, and on the establishment of a metric system, all of which were in the nature of a report of progress, but indicating a great deal of work done and much advancement toward the desired completion.

THE exhibit of drawings was the most creditable of any yet made by the association, both in the number contributed and their execution and in the character of the designs. The committee in charge are deserving of the highest praise for the manner in which they were collected and arranged. The hall upon the parlor floor near the entrance to the convention hall was filled with easels, and the walls of the ante-rooms were covered with drawings, water-color sketches and photographs. Four architectural journals contributed samples of their illustrative work. Many citizens called to see this display of art and architecture, and the exhibit was not only a success, but has done as much as the convention to show the public that architecture means something more than the mere planning of a building. The absence of the large number of special representatives of architectural journals brought so prominently into notice a year ago was freely commented upon, as out of nine journals of last year and four stenographers, the representatives of but three of these sat this year at the reporters' table, and but one stenographer took a verbatim report of the proceedings. The entertainment provided by the Association of Ohio Architects, in conjunction with the local committee, was all that could be desired; the absence of papers and long discussions left much time for entertainment, and the convention of 1887 will be noted in association history as one of the most sociable and enjoyable, as well as important, from the nature of the work in hand.

BRITISH architects, members of the Royal Institute, are much elated over the new privileges and responsibilities given them by the late revision of their charter. These new privileges include the right to hold and establish examinations not only within the United Kingdom, but also in any colony

or dependency thereof, and in India, the right to use distinguishing affixes, and also the power to declare that in the year 1892 every person desiring to be admitted as a fellow must have passed an examination. The president of the Institute in his annual address calls attention to this, noting the fact that while the Institute has been an incorporate body for fifty years, and has just received this recognition of its professional importance, that the London Colleges of Physicians and Surgeons had but just combined for educational purposes, though their charter dates back to early in the sixteenth century, and the surgeons trace their existence back to the reign of Edward II. In this light the work accomplished by the Western Association of Architects of the United States seems almost miraculous, as in reviewing the work under consideration by that association it seems to run in an exact parallel with that of the Royal Institute at the present time.

IT is certainly a coincidence that while the American Institute and the Western Association are considering the feasibility, and taking for granted the advisability, of a closer association of interests or a practical amalgamation, that the architects of Great Britain are also taking action leading in the same direction. At a council meeting in April last, at which the various organizations of architects, both provincial and metropolitan, were represented, a scheme of federation was reported. This report was favorably received, and is now in the hands of a special committee, which is engaged in the work of preparing a draft of by-laws, which, when completed, will be presented to a special general meeting for consideration. The general scheme upon which the report is based seems to be that the Royal Institute is to organize periodical conferences or conventions in the provincial cities, as well as at London, and the local societies already established, while retaining their *personnel* as far as name and internal government is concerned, will adopt the schedule of professional practice and charges sanctioned by the Institute, and these societies are also to further the work of the Institute as regards assistance to students and the conducting of local examinations of persons qualifying for membership in the Institute, and in return the Institute is to contribute to their support a proportion of the general fund. There, as here, are those who would try to belittle this movement toward a higher grade of professional practice and professional requirement by hinting at trades-unionism, but whether from ignorant laymen or from those who have made the profession a business, and have debased it by pursuing a line of policy that is not recognized as even respectable business practice, the general status of the architect will be improved, the standard of professional requirements will be advanced, and whether the work of federation under consideration is accomplished, the present will always remain in architectural history as the date from which a new and positive step in architectural development and advancement was made toward a higher and more perfect existence.

ATTENTION is called to the circulars printed elsewhere, issued by the secretary of the National Association of Builders, preliminary to the second annual convention of that association, which will be held at Cincinnati on the first Tuesday in February next. Perhaps the subject most interesting to architects and builders alike that will come before that meeting will be in the form of a report upon a uniform system of contracts, the initiative having been taken by the National Association of Builders at its first convention, and the appointment of a committee, followed by a request that the American Institute of Architects and the Western Association of Architects appoint similar committees of con-

ference. This was complied with by the architectural societies at their respective annual meetings. This joint committee will shortly meet in New York, and take up the work with a view to preparing a report before the meeting in February. The importance of a uniform system of contracts is only equaled by the seeming difficulty of its formulation, but the committees are from the strongest men in the associations they represent.

THE plans of Donaldson & Meier, of Detroit, were accepted in a recent go-as-you-please architectural competition for an addition to a high school building in Ann Arbor, Michigan, and they were told to go ahead with plans and specifications. When their work was well under way, so we are informed, they were advised by the Ann Arbor school board that their plans would not be accepted unless they gave bonds that the cost of the building complete should not exceed a specified sum, and that the structure should exhibit no defect within a year. They refused to give such a bond, and on the refusal of the board to receive the plans and pay for them, they threaten to bring suit for \$600. The irresponsible school board "resolved" that they had never agreed to accept the plans without such a bond, and proceeded to prove that they were under no obligation to the architects by offering them \$100 for their services. We imagine that the only architect who would sign such a bond as to cost would be the sort of architect who expects to reimburse himself by dividing up with the contractor. Nor would any architect who values his reputation sign a bond guaranteeing that no defect shall appear in work let by contract to the lowest bidder. If the facts are as we have been informed, we wish Messrs. Donaldson & Meier success in their suit, while at the same time we cannot forbear to point a moral at them for going into such a haphazard competition, and thereby allowing themselves to be put into such a predicament.

WITH reference to the suit of Messrs. Donaldson & Meier against the Ann Arbor school board, which we have elsewhere mentioned, we quote the following from an Ann Arbor paper:

The attorney of Donaldson & Meier, the architects, of Detroit, was in town Monday, looking after their chances for getting over \$100 out of the school board. To show of what little consequence is their attempted game of bluff, a reputable firm of architects in Detroit offer to take the suit themselves if their plans are adopted.

It is to be hoped that the school board, whatever may be the merits of their dispute with the "preferred" architects, are not altogether void of a sense of business honor, and treated the "reputable" competitor with the contempt his offer deserved. On the whole, this strikes us as the most wretched and contemptible violation of professional etiquette and decency that has come to our attention for some time. So long as architects who make any pretension to professional standing are guilty of such flagrant and vicious shifts to get their plans adopted, it is perhaps not to be wondered at that the local editor calls them "reputable," and that the average committee or public board expects to get an architect's best work for nothing, or next to nothing. If the statement of the Ann Arbor paper be true it would be interesting to know the name of this "reputable firm of architects."

THE Board of Court House and City Hall Commissioners of Minneapolis are among the latest public officers to advertise to the architectural profession their estimate of what architectural services are worth. The case is common, except the evidences are that this board is composed of men above the average in intelligence, a fact that only makes their ignorance on this point the more glaring. They have sent to the architects at large a circular inviting them to submit plans for a \$1,150,000 court house and city hall. They

not only state the many points in regard to design, construction, ventilation, etc., which must be studied in the design, but state that they "desire a good, solid, substantial building, thoroughly fireproof, admirably adapted to the purposes, an ornament to the city and a credit to the designer." To secure all this they offer prizes amounting in all to \$4,000, which shall go to "five different architects," in proportions of fifteen, ten, six, five and four hundred dollars, and "all plans for which the above-named premiums are paid are to be and remain the property of the board to do with as they desire." They do not obligate themselves to even give the work to the architect to whom they pay the highest premium, but if by any chance they should employ a premiated architect they specially stipulate that the amount of the premium shall be deducted from his further compensation. Plans must be drawn to a scale of eight feet to an inch, and each set must be accompanied by an estimate of cost, and all plans, elevations and sections, as well as a prospective view, must be mounted on stretchers. It is not necessary to point out to most architects by whom this circular has been received how thoroughly the entire matter should be let alone, even if it were not clearly a bid for plans, the bare office expense of which would, if executed with the proper degree of care and completeness, incur an outlay of at least the amount of the highest "premium." The "\$4,000, to be paid to five different architects," and the plans to "remain the property of the board to do with as they desire," is plain language, and no architect who might send in plans can say that the board has treated him badly should they pay him \$400 for what he has expended four times that amount upon, and say "we will use what we want of these designs but have no further need of your services, and we owe you nothing."

BUT let us say a word to the gentlemen who have issued this fine brochure upon architectural practice. They are, presumably, business men, and it is fair to suppose they do not believe that architects are different from the rest of mankind, and work for love, live on air and never pay their help, especially when they treat them so thoroughly as business men in asking them to enter into a "dicker" for plans. In architectural practice it has been found and established as just and usual that two and one-half per cent on the cost of work is the minimum price that should be paid for such plans as are asked for in this case. This board expects to obtain not *one* but five full sets of plans for less than one-seventh of that sum, or for about one-third of one per cent of the estimated cost of the structure. Comment is needless, for the board is composed of business men. Architects who have ability need not engage in such non-lucrative work and probably will not as there is a code of ethics understood by them that should prevent their engaging in the matter were the price paid for the plans completely satisfactory. The architects who may engage belong to another class. They may be unknown, or they may point to works already executed by them, but if the commissioners are prudent as they are ignorant of correct architectural practice, they will remember that court houses have fallen through the architect's inability to construct, have been from their erection a source of annoyance to the occupant and the beholder through the defective design and plan, and that there are counties that have paid for court houses many times the amount originally estimated through the dishonesty of those who called themselves architects, and are allowed to practice by a government that can see that doctors, lawyers and other professional men should be examined for their proficiency, but refuses to make the same rigid laws in regard to a profession in which a lack of knowledge and skill is more dangerous than in any other.

Photography in Architecture.*

PART II.—BY FRED D. FOSS.

THIS style of camera—the movable ground glass pattern—is regarded as the *ne plus ultra* for outdoor and architectural photography, for by its use, there is little or no danger of the ground glass being broken; either of the above-mentioned cameras fold into a very small space and are quite light, being easily carried for hours without fatigue. The plate-holder is the next important part of the outfit. There are as many styles of holders as one could wish, each style being advertised as the very best, but out of the entire lot there are probably only two that are actually serviceable, those made by the Scovill Co., and the Blair Co., and known as "feather weights," being light and compact and thoroughly adapted to the wants of outdoor usages. Anyone purchasing a camera of either of these makers would, of course, buy the holders of that manufacture, as they would exactly coincide with the ground glass, i. e., the space between the rabbet of the holder and the sensitized plate, and the rabbet of the ground glass frame and the ground glass, would be exactly the same, otherwise the holders would be useless, as one would never know when he had obtained a sharp focus. One plate-holder accompanies each camera, but it is advisable to have extra holders to be able to make more than two exposures while out viewing. (I neglected to mention that each holder carries two plates.) I have six holders with my viewing camera, which enable me to make twelve exposures without changing plates, and on my recent trip to Colorado, where the facilities of the darkroom were extremely limited, I found the extra holders very useful, my regret being that I did not have at least six more.

There is a holder that has lately been introduced which has one side of the slide coated with a slate solution that allows one to record the subject photographed, the time of exposure, the lens and stop used, the time of day and condition of light, and any remarks concerning the exposure that would be desirable to know, when ready to develop the plate. Many an exposure can be rightly developed by knowing exactly the conditions under which the exposure was made. It is impossible to remember the time and conditions of, say, twelve plates exposed during an afternoon as there is always more or less mental confusion when beginning the development of a series of exposed plates. The next article on the list of necessities is the tripod and there are as many styles of tripods, as there are styles of plate-holders, the most serviceable and best being known as the "extension pattern" which has grooved legs that can be adjusted to the desired height by means of a set screw fastened to the movable part of the leg. Bear one thing in mind in purchasing a tripod, and that is to get one that is strong enough to hold the camera securely and firmly, one that will not have the "ague" every time you place the camera upon it; a shaky tripod is worse than useless.

Having mentioned the principal parts of the apparatus necessary to produce a photographic negative, with the exception of the sensitized plates which I will speak of further on, allow me to briefly reiterate them: a lens, either a Darlot Rapid Hemispherical, a Voigtländer or a Dallmeyer, of a size suitable for the camera used; a camera, "Scovill's St. Louis Model" or a "Blair Reversible Back" of a size you may select; a 5 by 7 or a 6½ by 8½ is advised; extra plate-holders of the same manufacture as the camera decided upon. These extra plate-holders will be found very useful, but are not absolutely necessary; a tripod of the extension pattern, one that is sufficiently large to hold the camera firmly, a box of dry plates, and you are equipped to begin "shooting" at pretty bits of scenery or architectural subjects. The selection of dry plates is quite an important factor in the making of good negatives. The manufacturers of plates have reached a point where they no longer experiment at the expense of the consumer, but make plates that are free from fog (blurred upon development) chemical ailments, and other numerous troubles, that occurred too frequently in the earlier days of their manufacture.

There are as many brands of plates on the market as there are styles of tripods and plate-holders, but I shall only mention those that have been thoroughly tested and found "not wanting." For instantaneous exposures the "Cramer 30 or 40;" the "Carbutt Blue Label 25," or the "Seed 24," will be found to fill all requirements. The numbers mentioned are the sensitometer numbers, and indicate the rapidity of the emulsion with which the plate is coated, but the sensitometers of different makers seem to vary, as a "Seed 24" to equal a "Cramer 40," while a "Carbutt Blue Label 25" is equal, if not superior to either. For architectural exposures and general viewing the Carbutt "B" plate will be found the plate par excellence, as it is coated with a slow emulsion that permits of great latitude in the exposure, and at the same time is plenty rapid for general outdoor use. I have exposed a Carbutt "B" plate for ten seconds (using smallest stop in lens), and then immediately exposed another plate on the same subject, giving twenty-eight seconds' time, and upon develop-

*Continued from Vol. X, No. 3, page 20.

ment could scarcely notice any difference, excepting that the longer-exposed plate showed a trifle more detail, but it did not show flatness, and insipidity as an overexposed plate always does. Numerous other tests that have been made proved more than satisfactory, so the Carbutt "B" plate can confidently be recommended for architects' use.

In the next article will begin instructions in the development of exposed plates, giving the names, in plain English, of the chemicals used, and their effect, formulas of solutions, etc., and also the methods of treating underexposed and overexposed plates. I shall try to make my meaning very clear to beginners, but should I fail, shall be pleased to answer any inquiries addressed to me in care of THE INLAND ARCHITECT.

(To be continued.)

The Invention of the Arch.*

BY some it is considered that the Egyptians were the inventors of the arch, by others the Assyrians, and still others think that the Etruscans or Romans were the inventors of the true arch—that means of support which, in the hands of the Romans, achieved its greatest triumph and by which Rome was enabled to give that combination of stability and magnitude which distinguished all her works, and which is used today and probably will be for all time.

I shall endeavor to trace the earliest examples of the arch in ancient countries, and give a description of each in as clear and concise a manner as is possible from the data at hand.

I will start with the Egyptian, as I believe the earliest forms of arches are to be found in the pyramids of Egypt.

It is generally supposed that the Egyptians were ignorant of the true principles of the arch, and only employed two stones, meeting one another at a certain angle in the center, when they wished to cover a larger space than could conveniently be done by a single block. This, however, seems to be a mistake, as many of the tombs and chambers around the pyramids, and the temples at Thebes, are roofed by stone and brick arches of a semi-circular form, and perfect in every respect as far as the principles of the arch are concerned.

The Egyptians were so convinced in their own minds in regard to construction, that they never, or seldom, used any other constructive expedient than a perpendicular wall or prop, supporting a horizontal beam, and half the satisfactory effect of their buildings arises from their adhering to this simple, though in some places difficult mode of construction.

It is evident they were acquainted with the arch and its properties, as they used it in many of their less important buildings; but they knew that its employment generally would introduce complexity and confusion into their designs, and therefore they wisely rejected it from their more important buildings, although the roof of the tomb-chamber of the third pyramid (between three thousand five hundred and three thousand years before the Christian era) was constructed of huge blocks of stone, set obliquely, and extending from the side walls on which they rested, to the center, where they met at an obtuse angle. Internally these blocks had been coved out after being put in place, and the roof of the chamber was thus a pointed arch of a compressed character which, though not exhibiting any engineering skill since they were merely cut in the rock, imply, at any rate, an appreciation of the beauty of coved ceilings and suggest, if they do not prove, an acquaintance with the arch; and again, over the entrance to the Great Pyramid are four stones placed at an angle, and meeting so that they support each other and act as an arch, taking off the pressure of the superincumbent masonry. It is supposed that this same construction has been employed along the whole passage until it enters the rock; this it does at the distance of about one hundred and twenty feet from the outer air. And again at Beni Hassan, over 2000 years B. C., curvilinear forms reappear in the roofs, used in such a manner as to render it almost certain that they are copied from roofs of arcuate construction.

One authority goes so far as to maintain that the Egyptians had all the knowledge needed for the employment of the arch to any extent in their constructions, and that they purposely abstained from its use from a dislike of the complexity which it would have introduced, and a conviction of its architectural weakness, as a form wanting in durability. "The Arabs," he observes, "have a proverb 'that the arch never sleeps,'" consequently, if this was their belief, its employment would not have accorded with the governing ideas of Egyptian architecture, which were durability, repose and strength. We all know that the arch exerts unceasingly a thrusting force laterally upon the walls at its sides, and contrarily upon the keystone, which must be met and resisted, or it would tend to destroy the building of which it is a part; thus explaining why they did not employ it. The position here laid down may be true, but it can never be more than a hypothesis, since it is quite impossible to prove that a people knew how to do that which they never attempted to do. They were acquainted with the form, as one that would never bear a weight, but it would seem to have had no charms for them. The Egyptians never made any application of the arch on a grand scale, or to large edifices. This is not surprising, since arches would not have given the same impression of stability, firmness and strength, which is produced by the solid masses of flat stone, of which their roofs are composed. Instead of maintaining that they deliberately preferred these roofs to vaulted ones, it would probably be nearest the truth to say that being entirely content with flat roofs, the idea of constructing vaulted ones never occurred to them.

The earliest examples of the arch to be found in Assyria are the vaulted drains and chambers beneath the palaces at Nimrod, which were consequently as old as the eighth or ninth century before our era. The arches of these drains were almost always of the pointed form, and so far as we can now understand from the discoveries that have been made, it appears that the Assyrians used the pointed arch for their tunnels, aqueducts and

underground work generally, where they feared great superincumbent pressure on the apex, and the round arch above ground where that was not to be dreaded.

The great discovery of this class is that of the city gates at Khorsabad. These gateways are doubly interesting, inasmuch as they are the only examples which enable us to understand the gateways of the temple at Jerusalem, as described by Ezekiel. Their dimensions are nearly the same, but the arrangement of the side chambers and of the gates generally are almost identical. These gates had been built one hundred years at least before Ezekiel wrote.

These great arched gates were apparently all constructed in pairs, one for the exclusive use of foot passengers, and the other for wheeled carriages, as shown by the marks of wheels worn into the pavement in one case, while it is perfectly smooth in the other. Those used for carriages had plain jambs, rising perpendicularly twelve or fifteen feet; these jambs supported a semi-circular arch about eighteen feet in diameter, adorned on its face with ornaments of great beauty, formed of blue enameled bricks with a pattern of figures and stars, of a warm yellow color, relieved upon it.

The gateways for foot passengers were nearly of the same dimensions, about fourteen or fifteen feet broad, but they were ornamented by immense winged bulls with human heads, and between these two gateways stood a giant apparently strangling a lion. In one example the arch sprang directly from the backs of the bulls, and was ornamented similarly to that over the carriage entrances, and which is perhaps as beautiful a mode of ornamenting an arch as is to be found anywhere.

Other arches have been found in these Assyrian excavations, but none of such extent as these, and none which show more completely how well the Assyrians as early as 721 B. C. understood, not only the construction of the arch, but also its use as a decorative, architectural feature, and we all know from what we have been able to learn, that all of the arches above ground were almost invariably of elegant design and beautifully colored.

It may be interesting for some of you to know the way in which the Assyrians first built their vaulted roofs. They, of course, first used beams placed horizontally on the tops of the walls, but finding that they would bend too much under the weight of the earth of which their roofs were formed, conceived the idea of forming with the canes which abound on the river banks arches whose curvature was kept fixed by other canes placed beneath; these canes, of course, were placed vertically, horizontally, and diagonally, thus forming a wicker frame, on which they placed lighter canes lengthwise. On this framework they first placed a layer of soft clay, starting at the wall line and running up on the wicker work, probably only a few inches at a time. This was allowed to dry for one day, when another layer would be added, still following the form of the center as it rose, until the vaulting was completed, when the wicker work would all be removed, excepting that which gave the roof its curvature.

Later on, however, they were beginning to mold bricks as we mold them now, and it was then that a man of knowledge called Kabu, proposed to form their roofs by laying the bricks to a center, thus forming a complete semi-circle. The older men pronounced him crazy, and demanded his banishment, as they believed him to be a sorcerer. He was eventually obliged to quit the country, but his ideas have made their way nevertheless.

When they began to make bricks specially adapted for the construction of arches, it was not difficult to burn them and glaze their faces, as they burned and glazed pottery. It was then, with these baked and glazed bricks, that they formed the fronts of the archways, string courses, tablets, etc., which displayed their brilliant colors in the sunshine, and which they used so extensively in their interiors as well as exteriors.

Etruria, a city of Italy now called Tuscany, is supposed to have been a colony of Greece. We know very little of any of the buildings with which the cities of Etruria were adorned, beyond the knowledge obtained from the remains of their theaters and amphitheaters, of which they must have been justly proud. Their city walls surpassed those of any other ancient nation, in extent and beauty of workmanship. Besides these we have numerous works of utility, but these belong more strictly to engineering than architectural science; and after all perhaps it is justifiable to say that the Etruscans were not an architectural people, and had no temples or palaces worthy of attention. It at least seems certain that nothing of the sort is now to be found, even in ruins, and were it not that the study of Etruscan architecture is a necessary introduction to that of Roman, it would hardly be worth while paying any attention to Etruria.

The most important feature of Etruscan architecture was the arch, which they constructed in the form of a semi-circle, out of wedge-shaped blocks of stone. An early example of the Etruscan arch is in the city wall of Volterra. It was, therefore, from Tuscan architecture that Rome received the arch. A means of construction, without which she could never have carried out her immense architectural undertakings of a later period.

The architecture of the Romans can scarcely be said to be original; it was unquestionably borrowed from the Etruscans. The instruction in the art of building, that the Romans received from the Etruscans, was not probably before the time of Tarquins, 540 B. C., when their edifices began to be constructed on fixed principles. But it remained for the Romans to bring the arch into that high state of perfection in which we find it, not only in buildings but in aqueducts, roads, etc., some of their mighty works, works combining solidity of structure with beauty of form and utility of purpose, still remain for our admiration, having survived the decay of ages, and the more destructive hands of barbarian conquerors.

In every country, subject to their sway, roads, bridges and aqueducts remain in sufficient number and perfection to justify all praise.

Probably the greatest builder of ancient Rome was Appian, and his first great works were the aqueduct and road called the Appian aqueduct and Appian way and were built over 300 years B. C.

The Appian aqueduct was the first of these great works and by which Rome was so abundantly supplied with water. But it did not resemble the Roman aqueducts of later times—those long lines of arches with

* Paper read before the Buffalo Architectural Sketch Club, by James R. Kimball.

which we are all familiar—but was built underground from springs in the mountain until it entered the city and was then built on arches.

The Appian way is also well known, as it was along this road that most of the sepulchral monuments were built, after the decree that no dead should be buried within the city. Other roads and aqueducts rapidly followed, until it was linked with all the surrounding country.

It may be said that these magnificent works, as well as the vast amphitheaters and baths which afterward decorated Rome and every city in her provinces, were due to the invention of the arch. A simple piece of mechanism, but so wonderful in its results. It may be that the Romans borrowed it from the Etruscans; but if they borrowed the principle they used it nobly, as witness the bridges still remaining; also the copious streams carried over the plain for miles, at the height of sixty or seventy feet from the level of the soil.

In conclusion, it may be considered that the Egyptian form of two stones meeting at the apex was the first form of the true arch; but in connection with this I wish to present a few facts or fancies, of which you can judge for yourself, in regard to Egypt and Assyria, as to which is the older of the two people, for it is generally allowed by modern ethnologists that the ancient Egyptians, although located in Africa, were not an African people, but were immigrants from the East, probably Asiatic or Caucasian. If this is so, it seems quite probable that Assyria was populated long before Egypt, but of this nothing has yet been proven beyond a doubt, so we will have to read whatever we can and reason it out to suit ourselves.

Illinois State Association of Architects.

THE regular meeting of the association was held December 3, President S. A. Treat in the chair.

Among the members present were S. A. Treat, L. H. Sullivan, R. C. Berlin, D. Adler, Wm. Holabird, L. G. Halberg, N. S. Patton, L. J. Schaub, Greg. Vegeant, W. W. Clay, Geo. Beaumont, Alfred Smith, S. M. Randolph, Clinton J. Warren, O. J. Pierce, and others. After the usual lunch, which was unusually well served, the meeting was called to order.

The Chair: Gentlemen, you will now please come to order. The reading of the minutes of the last meeting will be proceeded with.

Secretary Berlin read the minutes of the preceding meeting.

The Chair: If there is no objection, the minutes as read will stand approved. The first business will be the report of the Executive Committee.

The association then went into executive session, which lasted over an hour.

At the close of the executive session Mr. Sullivan, chairman of the Executive Committee, introduced the subject of a seven per cent commission for dwelling-house work now under consideration by his committee, with a view to obtaining some further light regarding the general opinion of the association. Mr. Clay thought that the requirements in dwelling construction were so much greater than in the past that seven per cent would be a proper charge, * * * "and I would be willing to sign a paper with twenty other architects not to build a dwelling house for one year, or two years, or for any other length of time, for less than seven per cent on the general work and ten per cent for interior work. First-class workmen get it already for first-class work, and to have this of general practice there seems to be no other way than a measure of concerted action. Of course, those of us who will pledge ourselves not to do any general work for less than seven per cent may be called upon to wear the robes of martyrs for the first year, but by the end of that time there will be enough poor houses built to give us all the work we can do the next year."

The Chair: I understand that a circular similar to that which has been presented to some of the members, in which they were requested to bind themselves not to charge less than seven per cent, was under discussion at the meeting of the Executive Committee, but it has not been done yet, and I understand that the letter which has been sent, was sent out as a kind of a feeler to ascertain with what favor the proposition would be received to sign a pledge, if from twenty to twenty-five of the leading architects would agree to pledge themselves not to charge less than the specified rate.

Mr. Sullivan: Mr. Root, I believe, sent out this circular. There were two of them, one marked *a* in which the word "pledge" was used, and the other marked *b* in which the word "agree" to not charge less than seven per cent.

Mr. Clay: It seems to me that it would be well to provide that those who pledge themselves, may sign, with the understanding that until after a given number have signed, each one shall have the privilege of reconsidering his signature, so that before his final pledge is given he may be fully satisfied that those he considers should pledge themselves with him have done so.

Mr. Patton: The paper which was presented to me I declined to sign the clause *a*, in which I was to bind myself not to charge less than seven per cent. I was not willing to pledge myself not to do any work at a less rate, as there were exceptional cases in which we took less, as there were some men who never pay the first price. I am in favor of seven per cent, and I think we can probably get it as easily as we can five per cent, but I would not like to bind myself never to take less than seven per cent.

Mr. Clay: Mr. Patton, wouldn't you be willing to agree never to do work for less if a sufficient number of good fellows would do so—wouldn't you be willing to go to the poorhouse with them?

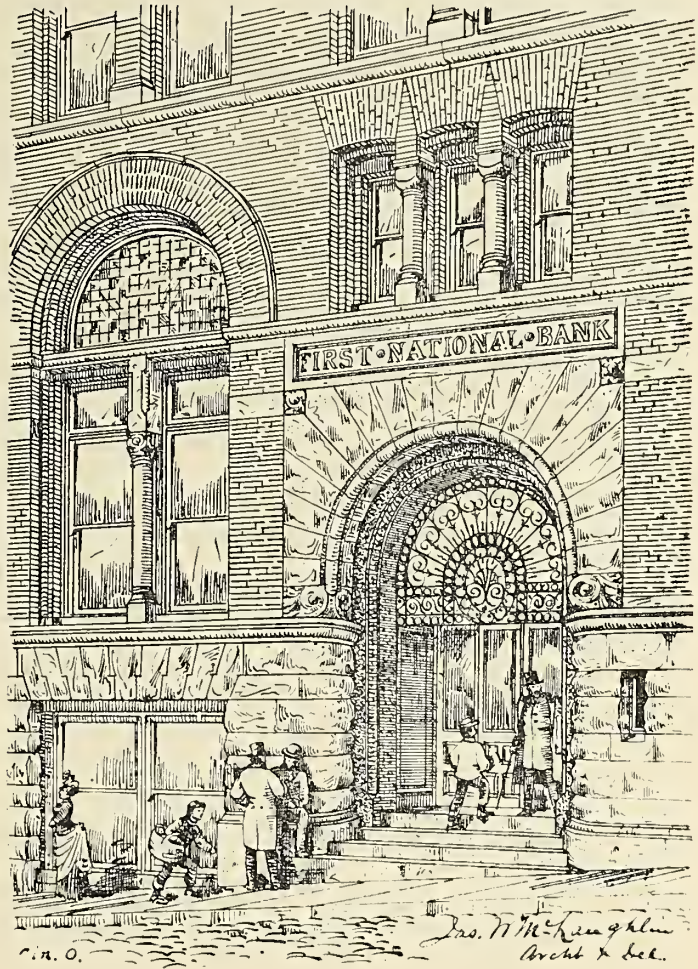
Mr. Patton: Yes, if I *knew* they would stick to it.

The Chair: Would it not be well to request the Executive Committee to withdraw this circular and issue another one?

Mr. Holabird: A man does not care to sign a circular of that kind until he knows who the fifteen others who sign with him are to be.

Mr. Patton: I move that, to get an expression of the members on the charge of seven per cent, it be referred to the Executive Committee to formulate some definite plan to be submitted to the next meeting of this association.

The motion prevailed, and on motion the association adjourned.



Fourth Annual Convention of the Western Association of Architects.

ABSTRACT OF PROCEEDINGS FROM THE STENOGRAPHIC REPORT FURNISHED THE WESTERN ASSOCIATION BY THE INLAND ARCHITECT AND NEWS RECORD.

THE association was called to order at Cincinnati at 12 o'clock November 16, in the ladies' ordinary of the Grand Hotel, by President John Wellborn Root, of Chicago.

The chair announced the first business before the convention was the calling the roll of membership.

Treasurer Samuel A. Treat called the roll, sixty-six members answering to their names.

At the conclusion of the roll call, President Root delivered his opening address, as follows:

GENTLEMEN,—As members of the Western Association of Architects, we meet under most auspicious circumstances.

The association which was founded so short a time since, whose possibilities not only for good to its members, but for existence in itself were then considered doubtful, has vindicated its right to be, and has proven itself strong in many potencies of future usefulness.

At this meeting, as at all annual meetings, let us recall certain facts inherent in such an association of men, and let us moreover glance for a moment at tendencies which will be recognized as common to almost each individual member, and ask if these tendencies be altogether for good.

When a large group of men band themselves into a corporate organization, the community of interest thus implied must be based upon a few essential facts, or the association is one in name only.

True democracy is among these facts most prominent. Each one must have most nearly at heart the interest of all, and each one must be prepared at every time, and for the ultimate good of all, to surrender small and temporary personal advantage for the common good.

We are all, in this union, upon a level plane. The heads of some may tower above, but the feet of none may stand below those of their brethren. Each man therefore, recognizes the fact that as far as can ever be possible, every advantage is conceded to his confrere that he could ask for himself, and that in no act of his shall his brother's rights be abridged by a hair's breadth.

This being true as a matter of theory, how shall it become fully realized as a matter of practice?

First, let us answer, by cultivating among ourselves relations of perfect understanding and friendship.

Men are so largely influenced by personal ends, that no relation can ever be established so ideal in its common help and consideration as that existing between two friends; and I am persuaded that out of any ten of the grievances one of us may in professional practice have suffered from another, nine will be found directly traceable to misapprehension and consequent estrangement. The short way to avoid these grievances is to

cultivate such warmth of personal relationship, that no man of us need for a moment hesitate in any case of doubt or possible distrust to ask of his friend full and free explanation.

Once this state of affairs is brought about, our code of ethics writes and enforces itself; and until it is brought about, any code must be inadequate.

At the same time, I am persuaded that we need some well-considered and strongly formulated code of ethics.

It is true that among us is a fairly good understanding of those matters in which we may encroach on the rights of others; but we need common reference, a plain statement of these matters, so that each man may be strengthened in right doing, and feel the weight of general displeasure when he goes wrong.

This is a matter of universal recognition, that men are apt to act with least circumspection in those affairs which lie so closely along the debatable line of right and wrong, as to escape the precise definition of the law, and of these matters, we in common with all men and all associations, must continue to have enough. But in architectural practice, and in the complex relationships pertaining thereto, there are many general understood matters apart from the regulation of fees and competitions, which would gain immense access of moral force by incorporation into a carefully drawn and rigidly enforced code.

In theory, a profession is in no one way more elevated above a trade, than in the fact that among its members certain methods are eschewed which among tradesmen may be legitimate.

Let us, code or not, keep this fact in mind, and in these respects act up to our profession. Among our professional brethren, he is wisest who keeps himself most actively in the wholesome atmosphere of general emulation. No one of us has cause for fear in the success of another unless he himself is unworthy; for the success of one is the gain of all, and the goal obtained by your rival of today, is only a mark to be passed by you tomorrow. Honestly passed; not by small and dishonorable means; not by "unconscious assimilation" or the finesse of doubtful politics, but by hard work and elevated ideas, by placing ourselves in sympathetic connection with those great forces of nature, and those masterpieces and minds in art which are our common heritage of strength and inspiration.

One word as to tendencies which seem to be manifested in much of our present work.

It is now fashionable to smile in a superior way at the architects of thirty years ago who prided themselves upon the scholarly correctness of their styles; how much more justly might those architects smile at the barbaric incorrectness of ours. Not that "correctness of style" as formerly understood means much; but each one of the "styles" set down in the books means the average thought of most profound and thoughtful men, whose work we may utterly set aside when we are as thoughtful and profound. The thing to insist upon is thought, not dexterity of pencil or "fad," but the full expression of one dominant and well thought out idea.

Idea is the crying need of our modern architecture. In England, if we may judge by the illustrated periodicals, architects are fortunate in having so far passed us, as not only to be sadly lacking in ideas, but to be utterly unconscious of their imbecilities.

For us there is no need for that state of mind, in which men, in the high name of art, live to momentarily galvanize into a semblance of life forms which breathe only for the passionate and patient worshiper.

Architecture is not a system of incoherently uttered and illogically occurring fashions. Architecture is not a "fad" which is respectable today because it apes the work of some great man, to whose creations it is comparable only as a jackdaw is to an orator. It is not architecture in whose name we dare erect today rough and brutal piles of stones whose only merit is their roughness, and which tomorrow we will spurn from us as unkept tramps of things.

Architecture is the material expression in stone and iron and brick of an idea—dominating, consistent, coherent; source and inspiration of ten or a thousand thoughts, but giving character to all. As such it can afford to lose sight at no instant of one thought by its great apostles and prophets.

These traditions which have lived for centuries are not to be venerated for age alone, but for their truth; they are not sacred because of their age, but are old because of their truth. All architecture based upon mere caprice is less enduring in the history of art than a breath.

Be it ours, therefore, to infuse into all of our work that earnest thought which will make it lasting.

The Chair: The next business in order is the reading of the minutes of the last convention.

Secretary James F. Alexander: Mr. President, as the proceedings of the preceding meeting have been fully published in an architectural journal, and the members all have read them so published, I would suggest they be considered as read and approved.

The Chair: If there is no objection it will be so considered.

The report of the Board of Directors is next in order.

Dankmar Adler: Mr. Chairman, the Board of Directors submit the following as their report:

The following business has been transacted since the last convention: The charges of unprofessional conduct, by Mr. E. W. Hammatt, against Mr. J. C. Cochrane, were investigated and dropped without action, after the board, as well as Mr. Hammatt, had become convinced that they could not be substantiated by legal proof. In this connection, the board deems it proper to advise members of this association that charges similar to those of Mr. Hammatt's can never be substantiated except with the assistance of one or more of the participants in the alleged corrupt or unprofessional action, just as accusations of bribery can rarely be proved except by the confession of either the briber or the person bribed.

The financial condition of the association may be summarized as follows:

At the time of the last convention there was on hand in the treasury the sum of \$854. There has been received since that date the sum of \$1,182 from dues of members. The expenses aggregate \$1,266.69, leaving

in the treasury the sum of \$775.33, which, together with \$300 of uncollected dues, make the total assets of this association \$1,075.

The purposes for which the before-mentioned expenditures were made were as follows:

For postage, stationery and other office expenditures.....	\$393 66
For traveling expenses of committee appointed to represent this association at the convention of A. I. A. in 1886.....	343 88
For traveling expenses of directors to and from meetings of the Board of Directors.....	135 55
For traveling expenses of secretary.....	71 10
For salary of secretary.....	200 00
For type-writing machine of secretary.....	90 00
For initiation fees returned.....	20 00

The board recommends that the traveling expenses of delegates appointed to represent this body at conventions of kindred architectural associations be not hereafter allowed.

The desire for the establishment of a uniform form of building contracts, to which utterance was given at the last convention of this association, has found expression in the National Association of Builders, which association has adopted resolutions to the effect that the working out of this problem be assigned to a joint committee, consisting of three representatives of the National Association of Builders, three of the American Institute of Architects, and three of the Western Association of Architects. Your Board of Directors has taken upon itself to promise, on behalf of this convention, that such committee will be appointed, and hereby recommends that this be done.

At the convention of the American Institute of Architects, held at Chicago last month, a committee was appointed, with instructions to meet a corresponding committee, to be appointed by the Western Association of Architects, for the purpose of determining, if possible, a practicable plan for consolidating into one body all of the architectural associations of the United States. It is the opinion of your Board of Directors that such consolidation would be of the utmost value to our profession, and heartily recommends the appointment of such committee.

In view of the large number of applicants for membership of this association, your Board of Directors recommends that the greatest possible care and circumspection be exercised in balloting, so that none whose membership would reflect discredit upon our association be admitted. The Board of Directors believes that you will find the present system of admitting members but little more satisfactory than that in vogue before this year, and in this connection wishes to call your particular attention to the report of the committee on raising the standard of membership of this association, and recommends and urges most strongly the immediate carrying into effect of the recommendations of that committee.

The Board of Directors further recommends the adoption of amendments to the constitution and by-laws, as follows:

First, that one vice-president be elected by the association, to be substituted for the appointment to the vice-presidency of all presidents of state associations, and corresponding alterations of sections 5 and 6 of the constitution.

We also recommend that article III of the by-laws be made to conform to sections 5 and 2 of the constitution, that the president be made *ex-officio* a member of the Board of Directors, and, finally, it is recommended that, in view of the haste with which the constitution and by-laws of the association were drafted, they be referred to the incoming Board of Directors for such modification as will harmonize their different sections with each other and with the action of the association at its various conventions. Finally, the directors wish to express their sorrow and regret that the hand of death has removed from our midst the venerable Thomas U. Walter, the architect of the United States Capitol building, before the recommendation of this board that he be made an honorary member of this association could be carried out, and suggests that a committee be appointed to draft resolutions of respect to his memory.

On motion, seconded, the report was received and placed on file.

The reports of the treasurer and the committees on state associations, on legal decisions, on statistics, on competitions, and that on metrical system of measurement were deferred at the request of members of these committees until later in the session.

The Chair: We will now listen to the report of the Committee on Statutory Revision.

Mr. Adler: Mr. President and gentlemen, I submit the following as the report on statutory revision of the Western Association:

Your committee has reported to you at the convention of 1885, the drafts of two proposed enactments, one for the regulation of the practice of architecture by the legislatures of the different states and another proposing a radical reform in the regulation of our national government buildings.

Neither of these bills have as yet become laws and your committee, therefore, does not deem it advisable to propose further statutory enactments, but recommends that the different state associations be requested to renew their efforts with the legislatures of their respective states for securing the adoption of an enactment similar to that presented to the St. Louis convention. In this connection, each state association is recommended to employ during the session of its state legislatures, a special agent whose duty it shall be to secure all information obtainable as to the views upon the proposed bill of individual legislators and members of committees and to communicate these to the committee of the state association in charge of the bill; also to make appointments for hearings of this committee before the legislative committees.

Your committee also recommends that a sub-committee be again appointed, to take the bill for the regulation of the erection of national government buildings, and by consultation with the committees on public buildings and grounds of the two houses of congress, make such modifications of the bill presented at the convention of 1886, as will tend to secure its passage.

With reference to the last-mentioned bill, your committee recommends further the engagement of a paid agent, with duties similar to those indicated in connection with the work to be done with state legislatures.

Your committee finally recommends that each individual member of the association make it his mission to do all in his power to influence public opinion in favor of the proposed measures, by conversation and argument with friends and acquaintances and through the press. Legislative action will always follow a well-defined and distinctly expressed public sentiment, but this can only be developed by the united efforts of those who first require the necessity for the proposed legislation.

The Chair: The next business is the report of the Committee on Standard of Professional Requirement.

Louis H. Sullivan: The committee offers the following report: The difficulties which arise in connection with this subject are manifold and perplexing. If the standard for admission to membership be fixed with sole regard to what is supposedly an ideal, the numerical growth of the association would be seriously checked, and its usefulness in many ways impaired; for it is evident that such a policy would preclude the admission of those of average capacity, and of the many bright ones who are contending against the difficulties which beset a beginner.

On the other hand, if the standard be fixed so low as to make possible the admission of all, it is evident that the standard of the association would degenerate, and, through the prevalence of a low tone, its influence for good would cease and its career be short-lived.

It is assumed by your committee that the policy of the association in this regard should be broad and democratic; that it should not set up factitious barriers against those who ask for admission; that the association wishes to count among its members every thoughtful, earnest, ambitious man in the profession; that it desires its strength and stability to be derived from the standing and capacity of the average man; that it welcomes the fervor of youth; that it cherishes the honorable record of old age; that, above all, it shall not place its standard for admission higher than it is itself prepared to exemplify.

It is assumed, as a paramount consideration, that the applicant's record, be it short or long, should prove honorable; second, that he evidence fair artistic, constructive or executive skill; third, that his admission shall necessitate an expressed pledge upon his part to sustain by individual effort a sound standard of professional bearing.

We believe, moreover, that this association, prior to raising in any way the standard for admission to membership, should itself declare the standard which it is willing should govern its own course; that, in short, we believe the time is now ripe for the promulgation of a code of ethics which shall define a desirable and practicable relationship of the members of this association to each other and to the incorporate body; a code which, in a word, shall indicate the degree and nature of the self-respect and good faith of this association.

Each year we meet in conference for three days; but it is during all the days of the year that we each individually should labor to raise, a little at a time, the standard of attainment in our profession. During the three days of the convention, we compare notes, we reach joint conclusions, we formulate them, we crystalize the experiences of the year past. Therefore the association would seem to stand, and should stand before the world, as a symbol and index of the architectural profession in the west, a sign by which it may be known and judged.

Although we do not understand this consideration distinctly to lie within the province of your committee, yet it seems so close upon the border that we feel justified in earnestly recommending to the association that a committee be appointed to prepare such a code, and that its report be considered at the convention of 1888; that such committee consists of three members from each state, who shall constitute sub-committees, each with its own chairman; that the sub-committees shall report to the chairman of the general committee on the 1st of April, 1888; that the general chairman shall forthwith collate these reports, and report the results to the sub-committees on the 1st of August; and that the consensus of their revisions, as formulated by the chairman of the general committee, shall constitute the report of the committee to this association.

By such means, after a year of careful investigation and deliberate thought, the full sense of this association may be obtained and expressed in a code of ethics.

To resume the prinie consideration: This committee recommends the following form for application blanks, to be addressed through the secretary of the Board of Directors:

To the Board of Directors, W. A. A.:188..

My full name is.....

My business address is.....

The name of my firm is.....

I have practiced the profession of architecture for.....years

The accompanying photographs (unmounted) numbered respectively, 1, 2 and 3, show completed buildings, erected from my plans and under my supervision.

No. 1 is a (here give general description of building, giving also name and address of owner and contractors.

No. 2, do.

No. 3, do.

The accompanying letters, numbered 1, 2 and 3, are from the respective owners of the above buildings, and indorse my character and proficiency.

We, members of the W. A. A. hereby indorse Mr.....'s application for membership. We know him personally; we believe him to be worthy of membership.

These applications are to be considered confidential by the Board of Directors, who shall meet on the first Monday in August of each year for the purpose of considering applications, after which date no application will be received.

The Board of Directors shall pass upon the applications, rejecting such as seem unfit, and as soon thereafter as practicable, but not later than the first of September, shall cause to be printed and mailed to each member of the association a list containing the names and addresses of the provisionally accepted applicants, together with the names and addresses of their lay and professional indorsers.

Opposite the name of each applicant shall be printed the words "yes" and "no," and each member shall vote by striking out the word alternative to his decision.

This list shall then be signed by the voter, and shall be mailed to the chairman of the Board of Directors, through the secretary of the asso-

ciation, who, at the ensuing convention, shall announce the election of all such who shall not have received more than five negatives.

Should vigorous protest be made by any member at the time of voting, it shall be the duty of the directors to make thorough investigation, and their decision shall be final as to the protest. The Board of Directors shall devise methods for maintaining the privacy of such letter ballot.

The following blank form is recommended as embodying the above:

OFFICE OF SECRETARY W. A. A.

.....1887.

DEAR SIR: Please vote by striking out the alternative word under the heading "vote," and return this sheet to me at your earliest convenience.

VOTE.		APPLICANT.		LAY INDORSERS.			INDORSING MEMB'RS.	
No.	Yes.	Name.	Address.	Name.	Occu-pation.	Ad'ress.	Name.	Address.
.....
.....

.....Secretary W. A. A.

By order Board of Directors.

LOUIS H. SULLIVAN, Chairman,

G. B. FERRY,

ISAAC HODGSON.

} Committee.

On motion, the report was received.

The Chair: The next order of business, gentlemen, is the report of the Committee on the Bill Governing the Office of Supervising Architect of the United States Treasury Department, of which Mr. Adler is the chairman.

Mr. Adler: The committee offers the following as its report:

Your committee reports that immediately after the convention of 1885, it placed itself in communication with the Corresponding Committee of the American Institute of Architects; that in conjunction with said committee it made several modifications of the proposed bill, and that a delegation of the two committees visited Washington after the introduction of the bill in the House of Representatives by Mr. Hewitt at the instance of Mr. A. J. Bloor of the committee of the American Institute of Architects; and that your joint committee had sundry interviews with members of the congressional committee to which the bill had been referred, but were not successful in securing its passage at that session of congress.

It is the opinion of your committee that the legislation we desire upon this subject can never be had unless there were unmistakable expressions of public opinion in its favor. It is the duty of the architects of this country, who more than any others are capable of recognizing the abuses of the present system and devising measures for their correction, to do all in their power to demonstrate to the public through the press and by all other means at their disposal, the correctness and soundness of the measures taken by this Association. For this purpose, every member of the Western Association of Architects should constitute himself a committee of one charged with the duty of exerting to the utmost his persuasive abilities upon all with whom he may come in contact and thus building up by the time fixed for the meeting of the next congress a public sentiment so strong that it cannot be resisted by the representatives of the people in congress.

The American Institute of Architects has continued the duties and functions of the committee with which we have been associated and has added to its personnel Mr. M. E. Bell, formerly supervising architect of the Treasury Department, and a western member not yet appointed. We recommend that similar action be had by this convention, i.e., that the duties and functions of the present committee be continued and that the personnel of the same be fixed as the convention may see fit.

The report was, on motion seconded, received.

The Chair: The next business in order, gentlemen, is the appointment of a nominating committee. Before proceeding to the appointment of this committee, I would state the secretary has received a number of letters from abroad in acknowledgment of circulars sent out by him in connection with a report of the last annual meeting of this association. Is it your pleasure that these letters be read now, or would you like to have the reading of them postponed to some other period of the meeting?

Mr. Patton: I move you they be read now.

The chair put the motion to the convention and it was carried.

Secretary Alexander then read correspondence from the architectural associations at Berlin, Paris, Manchester and Birmingham, England.

On motion, the letters were ordered received and placed on file.

Mr. Adler: Mr. President, I move that the course pursued at the last convention be made the rule for this convention—that the president appoint two nominating committees of five members each—but as the Board of Directors have recommended that a change be made in our constitution and by-laws, it might be well to depart from the regular order of business to the extent of taking up the recommended changes in the constitution and by-laws before the nominating committee is appointed. I move you, therefore, that the order of business be postponed until the matter of changes as recommended is passed upon, and that section V of the constitution of this association be amended so as to read: "The officers of this association shall be a president, a vice-president, five directors, a secretary and treasurer." The purpose of having the vice-president a member of this association is, that it has occurred and may occur again the president of this association is also the president of a state association. In the event of the conventions of the two associations being held at the same time, his absence from this association meeting may be unavoidable, and in the absence of the president there would be no one to fill his place, as the question would arise, under the present rule, which of the presidents of the several state organizations should be recognized as *ex-officio* chairman of the association. It was in view of this

possible difficulty the Board of Directors thought it advisable to recommend that the vice-president should be an elective officer of this association.

Mr. Sullivan: In the possibility of the absence of both the president and vice-president, might it not be well to have two vice-presidents. I move, as a substitute, "That the officers of this association shall consist of a president, two vice-presidents, five directors, a secretary and a treasurer."

On being put to the vote, the amendment of Mr. Sullivan to Mr. Adler's amendment prevailed.

Mr. Patton: I think the Board of Directors suggested that the president shall be made *ex-officio* a member of the Board of Directors. It seems to me that the vice-presidents should be active officials and not mere figureheads, and if the president is made a member of the board *ex-officio*, why not the vice-presidents?

The Chair: I would suggest that Mr. Patton's question should come up under its proper head. A point of order was raised that there was no question before the association, in which the chair concurred.

Mr. Adler: I now again move that two committees be appointed to nominate a board of officers for the ensuing year, and that each be instructed to present a list of names for the respective positions to the conventions at the beginning of tomorrow's session. The motion, on being seconded and put before the convention, prevailed.

The chair then appointed the following named gentlemen as the respective committees:

C. C. Helmers, W. R. Forbush, Alf C. Clas, C. O. Arey, N. S. Patton, D. Adler, W. S. Mathews, C. A. Curtain, F. Baumann, H. L. Gay.

On motion of Mr. Helmers the committees were instructed to also nominate the place of next meeting.

The Chair: The balloting for candidates for membership is now in order.

Mr. Helmers: The secretary is having a number of tickets printed with the names of applicants for membership upon them, and which we will not be able to get until this afternoon. I think it will be as well to put off the balloting until we receive these tickets; besides, I think perhaps the members are not disposed to ballot on the candidates until they first hear further from the Board of Directors on the candidates for admission.

Mr. Adler: The most of the applications that have come before the board have been in conformity to the constitution, and nothing was said about them with the exception of those of the Alabama State Association of Architects, which, it appears from the list that has been sent of the members of this association of those making application, that they were recommended by the secretary of that association, who himself is not a member. It would have been proper to have rejected all of these applications on the score of informality, but it did not seem right to the board to close the door of this association in the face of those architects simply for the reason they were unknown personally to the board; and for another reason, that, up to the time of the organization of that association, there were no members of the Western Association in the State of Alabama. It seemed unfair, because they had no other endorsement than that of their secretary, to ignore them. The board did this. It had the proceedings of that association brought before it to ascertain whether by the record of their work, from the time of their organization in August, up to about a week ago, and the board found, after a careful inspection of the records, that the proceedings of the Alabama State Association, that the conduct of the organization has been characterized by a great degree, I may say a remarkable degree, of good judgment and good sense. Almost among its first recommendations was found to be the appointing of a committee in respect to the public buildings of the State, and that they had adopted for its code and management of competitive rivalry a code corresponding to that which this association adopted at the St. Louis convention; and it appears from those records that the association has made a good strong fight, with considerable solicitation to have this code adopted by the architects of the state. It has worked harder in this respect than many other organizations much older in years than it is. The board was unanimously of the opinion that this association would honor itself by recognizing the Alabama Association of Architects, and the claims of its members for affiliation with this body. The board therefore recommends that the informality of the applications of the Alabama association be overlooked, and that they be balloted for on their merits, as if they were regularly recommended. A similar state of affairs occurred in the applications from the Michigan State Association. The informality in this case was still greater than that of the Alabama State Association. The applications of the State Association of Michigan were not received until after the constitutional limit had expired. This was caused to some extent by the delay which attended the correspondence, and measurably unavoidable. The board knows nothing personally of the individual members of the Michigan State Association, but there are quite a number of its members who are known to members of this association—and favorably known. Quite a number of specimens of their handiwork are among the exhibition of drawings at this meeting, and they will be found to bear critical inspection together with the work of recognized architects among the profession. In referring to this state association the board recommends the informality in their application be likewise overlooked, and that their names be balloted for with the others on their merits. The board does not pretend to say the Alabama and Michigan State Associations shall be accepted by the members of this association, but merely to recommend the waiving of the informalities of their applications. I would therefore advocate that their names be balloted for with the rest, and as the secretary has reported he is having ballots with the names of applicants printed, I would move that the balloting for membership be postponed until the next session.

On being put to vote, the motion prevailed.

The Chair: I am in receipt of a communication from the president of the Chamber of Commerce, inviting the members of this association to visit the Chamber of Commerce.

Mr. Rapp: I have an invitation from the president of the Art Museum inviting the association to visit that institution; also from Messrs. A. R. Vail, Alexander McDonald and George K. Schoenberger to visit their residences.

The invitations were referred to the Committee on Entertainment.

Mr. Adler: Mr. President, I move that Article III of the by-laws be amended by interpolating the words, "The president shall be *ex-officio* a member of the Board of Directors," and that "the attendance of three members shall constitute a quorum."

The Chair: The proposed amendment leaves the section as it is, except the addition in regard to the president and the quorum.

Mr. Patton: Mr. President, I move to amend so as to make the vice-presidents *ex-officio* members of the Board of Directors. My object in making this motion is, that when a vice-president is called upon to take the place of the president he will have the same opportunity for acquiring a knowledge of the transactions of the board the president has.

Mr. Adler: I accept the amendment, and move as an amendment that Article III of the by-laws shall be amended so as to read, "a president, two vice-presidents," and the other members of the Board of Directors be reduced to two.

The Chair: The motion proposes to reduce the Board of Directors to five, three of whom, the president and vice-presidents, shall be *ex-officio* members.

Mr. Patton: I move that section V be amended so as to read, "a president, two vice-presidents, a secretary, and treasurer and a Board of Directors;" and that Article III of the by-laws be amended to read, "The Board of Directors shall consist of the president, two vice-presidents, as *ex-officio* members, and four fellows."

The question on Mr. Patton's amendment being called, was put to vote and lost.

The Chair: The question now recurs on the original amendment by Mr. Adler, as proposed by the Board of Trustees. Are you ready for the question?

The original motion of Mr. Adler was then put before the convention and carried.

The Chair: The constitution is so amended.

Mr. Adler: Mr. President, our constitution and by-laws were drafted in such a hurry at our first convention that it was found necessary to amend them at our conventions at St. Louis and Chicago, where also they, being done in open convention, were rushed through in such great haste that in a number of instances there is a conflict with each other; that is the by-laws are not in harmony with the constitution. It was for this reason that the Board of Directors recommended a revision of the constitution and by-laws by the incoming Board of Directors. It was not intended that they should be changed materially, but that the different parts which were not in harmony should be made so, and to express their meaning so there should not be one clause contradicting another. I move that the Board of Directors be authorized to make this revision.

Mr. Sullivan: I second the motion.

The Chair: Mr. Adler's motion is that the incoming board be instructed to classify and harmonize the constitution and by-laws. Are you ready for the question?

The motion being put, was carried without dissent.

Mr. Sullivan: Mr. President, I wish to offer this resolution:

Resolved, That the Board of Directors be empowered, and consider and proceed hereafter in matters of election to membership, upon the basis of the report of the Committee on Raising the Standard of Admission to Membership.

The resolution was adopted.

Mr. Sullivan: I also, in behalf of the Committee on the Standard of Admission to Membership, offer the following:

Resolved, That a committee be appointed to prepare and submit to the next annual convention a code of ethics, and that the president appoint himself a member of this committee; that such committee shall consist of three members from each state, who shall constitute a sub-committee, each with its own chairman; that the sub-committee shall report to the chairman of the General Committee on the 1st day of April, 1888; that the general chairman shall fully collate these reports, and report the result to the sub-committees on the 1st day of August; and that a consensus of their revision, as formulated by the chairman of the General Committee shall constitute the report to this association.

Mr. Adler: Does Mr. Sullivan mean that the chairman of this convention shall appoint himself a member of this committee?

Mr. Sullivan: Yes, sir; the resolution reads, "and that the president shall appoint himself a member of the committee."

The chair then announced the following members as constituting the committee:

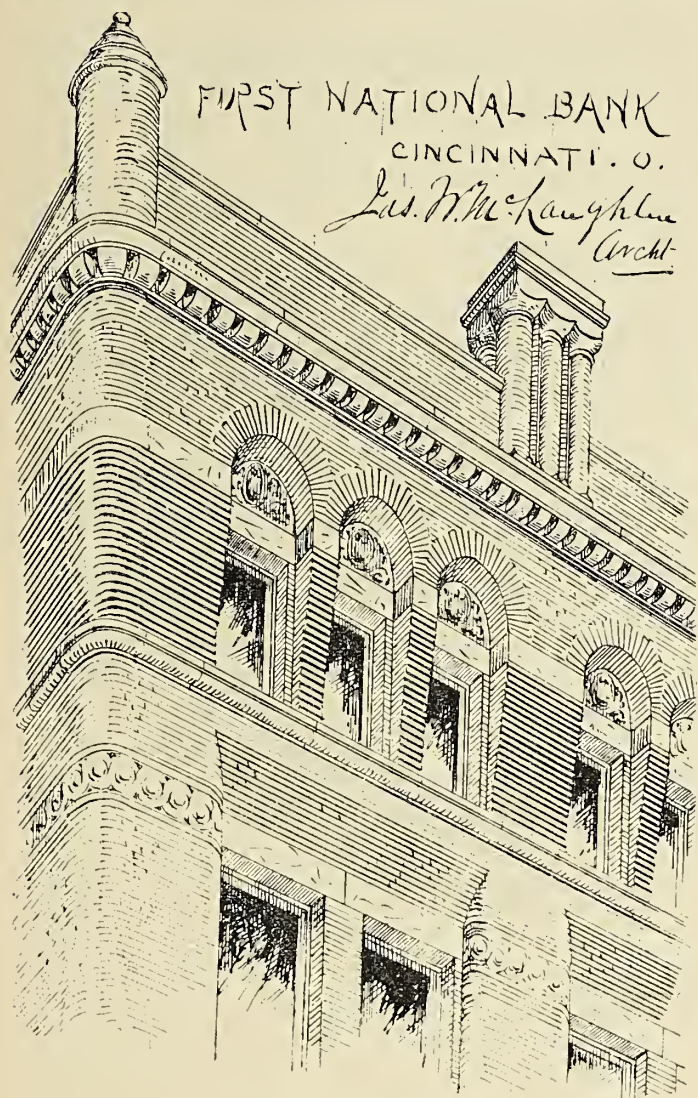
Illinois: L. H. Sullivan, chairman, J. W. Root, S. A. Treat.
Indiana: J. F. Alexander, J. W. Hammond, J. W. Reed.
New York: J. G. Cutler, W. W. Carlin, L. Bethune.
Kansas: L. M. Wood, J. G. Haskell, E. T. Tarr.
Texas: W. H. Tyndale, J. R. Flanders, N. J. Clayton.
Michigan: S. J. Osgood, W. H. Parker.
Kentucky: H. P. McDonald, C. A. Curtain, H. C. Rowe.
Dakota: A. E. Cobby.
Wisconsin: G. B. Ferry, E. T. Mix, G. Staltz.
Nebraska: Sidney Smith, L. Mendelshonn, G. W. Field.
Tennessee: C. C. Burke, J. H. Mathews, M. H. Baldwin.
Georgia: A. C. Bruce, J. H. Morgan, A. M. McMurphy.
Wyoming: J. S. Mathews.
Missouri: C. C. Helmers, C. E. Illsley, A. Van Brunt.
Minnesota: F. G. Corser, G. M. Goodwin, E. W. Carr.
Iowa: W. L. Block, E. H. Taylor, J. M. Maslin.
Ohio: Chas. Crapsey, G. W. Rapp, C. T. Schweinfurth.
Colorado: G. W. Roberts, N. W. Wall, C. E. King.

The Chair: Gentlemen, it has reached a very suitable time for an adjournment.

Mr. Rapp: Mr. Chairman, we have among our visitors today the mayor of our city. Permit me, sir, to introduce to you, Amor C. Smith, Jr., mayor of the city of Cincinnati.

After mutual greetings, his honor made a felicitous speech which was received with applause.

At the conclusion of Mayor Smith's address the convention adjourned for the day.



SECOND DAY'S SESSION.

The convention was called to order at 10:30, President Root in the chair. The following nominations were bulletined by the committees:

Dankmar Adler's committee:

For president, Sidney Smith, of Omaha, Neb.

For first vice-president, James F. Alexander, of La Fayette, Ind.

For second vice-president, William C. Smith, Nashville, Tenn.

For secretary, C. C. Helmers, of St. Louis, Mo.

For treasurer, J. J. Flanders, of Chicago, Ill.

For Board of Directors: John W. Root, Chicago; George B. Ferry, Milwaukee; F. G. Corser, Minneapolis; Wm. Holabird, Chicago; Walter R. Forbush, Cincinnati.

Place of next convention, Chicago, Ill.

Charles C. Helmers' committee:

For president, Sidney Smith, of Omaha, Neb.

For first vice-president, Dankmar Adler, of Chicago, Ill.

For second vice-president, George W. Rapp, of Cincinnati, Ohio.

For secretary, L. H. Sullivan, of Chicago, Ill.

For treasurer, Samuel A. Treat, of Chicago, Ill.

For Board of Directors, John W. Root, of Chicago; J. J. Flanders, of Chicago; George B. Ferry, of Milwaukee, Wis.; C. F. Schweinfurth, of Cleveland, Ohio; P. P. Furber, of St. Louis, Mo.

Place of next convention, Chicago, Ill.

The Chair: The calling of the roll and the reading of the minutes of yesterday's session will be omitted. The first matter before the convention is the report of the treasurer.

Treasurer S. A. Treat: The figures I have to give you stand substantially the same as yesterday.

To the Western Association of Architects:

GENTLEMEN,—Herewith the treasurer presents his report for the year ensuing, November, 1887:

RECEIPTS.		EXPENDITURES.	
Balance on hand November, 1886,	\$ 854.02	By disbursements.....	\$1,260.69
Cash received.....	1,237.00	Cash on hand.....	830.33
	2,091.02		\$2,091.02

I hope the chair will not forget to appoint an auditing committee, which was omitted a year ago.

J. J. Flanders: I move the treasurer's report be referred to an auditing committee.

J. W. Yost: I second the motion.

The motion being put to the convention, prevailed, and the chair appointed Messrs. Flanders and Yost as Auditing Committee.

The Chair: We will hear from the Committee on Metrical System of Measurement.

Mr. Patton, on behalf of the committee, read the following report:

The work of your committee on the introduction of the metric system has been mostly of a preliminary character. It is not to be expected that a reform of so sweeping a nature can be brought into immediate use. We do not need brilliant and spasmodic efforts as much as a patient and persistent pushing of this subject into the public view until it receives the attention which it deserves. During the past year we have learned in what channels we can best direct our efforts, and have made a beginning in the way of practical work. Our successors will find the path marked out for them and will be able to enter at once into effective operations.

Your committee has had considerable correspondence with the Committee on Weights and Measures of the Boston Society of Civil Engineers, which seems to have been aroused to renewed effort by the action taken by this association at its last convention. Mr. Fred Brooks, of that society, read a paper in discussion of the committee's report. This discussion and the report of the committee have been printed in a special pamphlet, a copy of which is hereto attached. Mr. Brooks has kindly furnished several thousand copies of this pamphlet to our committee. We have distributed a portion of them and it is the intention to send the remainder to other societies, in connection with a circular letter, explaining the action taken by this association and requesting coöperation in bringing the subject to the attention of congress.

The special work of our committee is to petition congress and persuade others to do the same; but how can we present an effective plea unless we are fully persuaded in our own minds, and how can our plea have any weight unless it represent the intelligent opinion of the whole profession? Therefore, it seemed important to collect information concerning the practical application of the metric system to architectural work. Mr. Adler has assisted our committee by preparing a circular letter and sending the same to several architects in Germany, making inquiries as to the workings of the metric system in their practice. Replies have not yet been received to these circulars; when such arrive, it is proposed to prepare a report on the application of the metric system to architectural practice.

It is obvious that the introduction of any general change in our system of weights and measures must come through congressional action. Such action can only be secured by persuading congress that there is a general demand for the proposed reform.

Influence must be brought to bear on congress in the right manner and at the right time, therefore the most important preliminary step is to determine the time and manner of our application to congress. In the opinion of the committee it will be impossible to secure from congress, at any near date, the passage of a law making the use of the metric system compulsory throughout the country. Another partial measure seems to give greater promise of success.

In 1866 The Congressional Committee on Coinage, Weights, and Measures, proposed the exclusive use of the metric system in the government service.

This measure has been urged by various societies and was brought before congress in the form of a bill in 1884 and again last year. Congress has not yet appreciated the importance of this subject and has taken no action. At the coming session let the Western Association of Architects add its influence to that already in the field and let us arouse our friends and neighbors to join us. The reform is sure to come sooner or later; let us make it sooner.

The advantage of using the metric system in the government service is apparent without argument. It will antagonize no private interests and cause no expense to private parties. It will give a practical test of the system on American soil, and that test will be varied and complete. The coast survey, custom houses, navy yards, light house board and government architect's office will demonstrate whether the system is adapted to the varied wants of professional, mechanical and commercial pursuits. Then after a fair trial, the favorable reports of the government officials will insure the passage of a law making the use of the system compulsory throughout the land.

A communication was addressed to the American Institute of Architects, suggesting that the Institute revive the interest which it had formerly manifested in this reform. This communication was acted upon by the Institute at its recent convention, the subject being referred to the board of trustees with power to act.

In conclusion we urge the appointment of a committee to continue the work we have begun, and emphasize the importance of active efforts on the part of every friend of the reform. Even benighted Mexico has adopted the metric system and it is time that the United States put itself abreast of the progress of the age in this important matter.

Respectfully submitted,

T. B. ANNAN,
N. S. PATTON,
CHAS. CRAPSEY.

On motion, the report was received and adopted.

The Chair: Gentlemen, what is your pleasure in regard to the appointment of a committee recommended in the report.

Mr. W. C. Smith: I move that the chair appoint a committee of three.

Mr. Sullivan: I move that it be referred to a special committee.

Mr. Patton: I wish to make one suggestion. Last year considerable delay was occasioned by the members of the committee being appointed from three different states; much time was wasted in the work of the committee in consequence. I think in the appointment of the members consideration should be given to locality, that they should reside near to each other, so that personal conferences may be easily had when necessary.

Mr. Crapsey: I trust that Mr. Patton will be continued on the committee and made the chairman, and that in forming the new committee the president will leave my name off and appoint some other gentleman.

Mr. Smith: I move that a committee of three be appointed to take charge of the Metrical System Bill, and that Mr. Patton be continued as one of the committee.

The Chair: The motion is that two members be appointed to that committee. Are you ready for the question?

The question being called, Mr. Smith's motion was carried.

The Chair: The members of this committee will be Normand S. Patton, of Chicago; J. J. Flanders, of Chicago; and F. S. Allen, of Joilet, Ill.

The Chair: The secretary will now read the report of the Committee on Uniform Contracts and Specifications.

Mr. James F. Alexander, chairman of the committee, submitted the following:

To the President and Board of Directors of the Western Association of Architects:

Your Committee on Uniform Contracts and Specifications, agreeable to request from the National Association of Builders, held a meeting at the office of Henry L. Gay, in Chicago, for the purpose of consultation with them as to the use of the uniform contract.

The committee consists of Mr. Edward Scribner, chairman, of St. Paul, Minn.; Mr. George C. Prussing, Chicago, Ill., and Mr. P. B. Wight, of Chicago.

There were also present, Mr. Blair, of Cincinnati, president, and Mr. Sayward, of Boston, the secretary of the National Association of Builders. The committee gave us an unusually fair presentation of their earnest desire that a uniform contract should be arrived at if possible, and many of the arguments advanced by them were of great force as to its necessity; the chief being, that with a number of contracts of different forms and different provisions, that it was an impossibility for a contractor doing a large business to keep himself informed as to the exact obligations which he was incurring in signing any given one of them, and also that great advantage be gained both by the architects and contractors from the use of a uniform form of contract, in that the construction of the contract by any one court would be a guide in the interpretation of the same contract in another state.

We had before us probably one hundred forms of contracts which were in issue in the practice of one or another architects. A careful comparison of them convinced your committee that the scope of the work involved, in order to present uniform contracts which would have a reasonable prospect of being available through the United States, was much larger than the facilities which were at their command, would enable them properly to cover, and that while there were many reasons why a uniform contract would be desirable, it would require a further investigation with an organization of a wider scope to arrive at a proper solution of this matter. We, therefore, decide to make the following recommendations:

1. That a standing committee on uniform contracts and specifications be appointed, and continued from time to time until the matter has been determined one way or the other, and if determined favorably to a uniform contract, that the committee would remain in existence in order to reserve its uniformity and collect data regarding its interpretation by the courts in different localities.

2. That the several state associations, both of builders and architects, designate some one to act as a means of communication between the committees and the mass of persons interested and to collect information.

3. That the Committee on Legal Decisions be directed to furnish the above mentioned committees from time to time such information as they may have.

4. That the committee be appointed at the next meeting of the Western Association, and that a request at the same time be made of the American Institute of Architects and the National Association of Builders to appoint a like committee with instructions to confer with the committee of the Western Association from time to time until the final report be arrived at.

5. That these committees each consist of three members. Your committee was of the opinion that a uniform specification is not practicable as the matter appears at this time.

We have the honor to be, your Committee on Uniform Contracts and Specifications:

JAMES F. ALEXANDER, La Fayette, Ind.
H. P. McDONALD, Louisville, Ky.
GEORGE W. RAPP, Cincinnati, Ohio.
E. H. TAYLOR, Des Moines, Iowa.
GEORGE B. FERRY, Milwaukee, Wis.

On motion, the report was accepted.

The Chair: As a committee of three, as suggested in the report, I will name D. H. Burnham, of Chicago, Ill.; J. F. Alexander, La Fayette, Ind.; and Sidney Smith, Omaha, Neb.

Mr. Adler: Among other matters the Board of Directors stated in their report, that at the last convention of the American Institute of Architects they had appointed a committee of five to act in conjunction with a similar committee to be appointed by this convention, with a view to determining some feasible plan for the consolidation of the several architectural associations of America into one organization. Your Board of Directors were very much in favor of, at least, making an effort toward such a consolidation, and have recommended in their report that the president be authorized to appoint a committee to act with the committee of the American Institute. I now move in behalf of the Board of Directors that the Western Association of Architects appoint a committee of five, corresponding to the committee of the American Institute of Architects.

Mr. Sullivan: I move as an amendment to Mr. Adler's motion that the president appoint himself a member of that committee.

Mr. Adler: I would say the committee ought to be instructed to report the full details of their plan to the Board of Directors a sufficient length of time before the next annual convention, so that the plan deter-

mined upon can be submitted to the membership; I would say at least one month before the meeting of the convention.

Mr. Sullivan: I would suggest the 1st of August.

Mr. Adler: Let it be understood the report is to be made by the 1st of August.

The Chair: It will be so understood. I name as the committee to coöperate with the committee of the American Institute, Dankmar Adler, Chicago; Geo. B. Ferry, Milwaukee, Wis.; W. W. Carlin, Buffalo, N. Y.; A. Van Brunt, Kansas City, Mo.; and John W. Root, Chicago.

The Chair: The balloting for candidates to membership is now in order.

Mr. Adler: I move that the rules of the Association be dispensed with, with reference to the candidates applying for membership from the Alabama association. I explained yesterday the reason why I make this motion.

The motion prevailed.

Mr. Adler: I further move, to save time, that the rules of the Association be dispensed with in the cases of the applications from the State Association of Michigan, and also in the case of a number of applications from architects who are not members of the state associations of Michigan and Alabama, whose names came too late to send in the regular notice. In the case of the last mentioned, in every instance they are men well worthy of membership of the association, and let us not ask in their case only what is for the best interest of this association.

The Chair: By what method had we best proceed with the balloting?

Mr. Sullivan: Mr. President, I move that we proceed to ballot in the following manner: that the names of the candidates be distributed among the members, and they scratch out such names as to them seem objectionable. I ask if our by-laws do not state that five votes are required for a negative?

The Chair: Article IX of the by-laws states: "Five ballots against any applicant will be sufficient for his rejection." The question is on Mr. Sullivan's motion.

On being put to the convention, the motion prevailed.

Mr. Adler: I would like to take your time for one moment before balloting. I wish to say this in behalf of the Board of Directors. The list presented to you is a very large one. In the case of many of the applications, they were received by the Board of Directors too late to send them to the members within the thirty days' limit of the by-laws. The Board of Directors also wish to state that in regard to different applications for admission, several gentlemen on the original list, in cases where objections were made, their names have been withdrawn, giving those gentlemen an opportunity to present their cases at a future convention. The directors also wish to say, with reference to the State Association of Alabama and Michigan, that they did not wish to make the recommendation for those gentlemen any stronger than yesterday; they did not wish to assume the responsibility of recommending every member of those associations; they request each of you to scrutinize each application carefully, and wish to remind you that this association is strong enough to reject any applicant that is not desirable. I think, Mr. President, sufficient time should be given to the members to scrutinize every application carefully, and also time to give any member of the association who knows of any serious objection to a candidate to make it known, and we hope if there is any such knowledge among members they will do a little missionary work.

The Chair: In furtherance of what Mr. Adler has said, I would say the list of applicants is so very large that it is almost impossible to give it the careful scrutiny which is necessary to be properly advised, and for this reason it is of the greatest importance that any member who possesses any information that should be in the possession of the convention, should express it very freely. There should be no hesitation or modesty in this respect. In considering the names of candidates bear in mind that Section IV of the constitution reads: "Any architect practising his profession in the United States may become a fellow of this association," and that Section X of the constitution reads:

SECTION X.—The status of an architect is hereby defined as follows, to wit: An architect is a professional person whose sole ostensible occupation consists in supplying data preliminary to the material construction and completion of buildings, in exercising administrative control over the operations of contractors supplying material and labor incident to the construction and completion of buildings, and in officiating as custodian and arbitrator of contracts, stipulating terms of obligations and fulfillment between proprietor and contractor.

Five votes will reject any application. I appoint Charles Crapsey and C. A. Curtin as tellers.

The lists already being distributed among the members undergoing scrutiny, the chair said: When this large committee that has been appointed on a professional standard shall have completed its work, and it comes before this convention and adopted, we shall hope, among other recommendations, there will be one providing that all members belonging at that time to the association shall be submitted exactly to the same requirements as any member who may come in afterward—that at some future time we shall all be made to go through the sieve of professional standard requirement, and such of us as fail to meet it shall be dropped from the association as any applicant who should be found wanting, and considered as though they never had been elected to membership. While the tellers are continuing their work, I would like to make one or two announcements. The following telegrams to the association have just been received from Mr. A. J. Bloor, which the secretary will read:

NEW YORK, November 16, 1887.

To J. F. Alexander, care of Charles Crapsey, Fifth and Vine streets, Cincinnati, Ohio:

The Board of Trustees of the American Institute of Architects, now in session, send greetings to the Western Association.

A. J. BLOOR.

NEW YORK, November 15, 1887.

To J. F. Alexander, Secretary, care of Charles Crapsey, Fifth and Vine streets, Cincinnati, Ohio:

Please thank the association for the honor conferred. Success to your convention and speedy union of means for common ends.

A. J. BLOOR.

The Chair: We are in receipt of a letter from Mr. J. Milton Blair, of the Cincinnati Centennial Exposition Committee:

CINCINNATI, Ohio, November 17, 1887.
To the Western Association of Architects:
GENTLEMEN,—The Centennial Exposition of the Ohio Valley and Central States, to be held in this city in 1888, beginning July 4 and closing October 28 of the same year, commemorating the one hundredth anniversary of this city, the Ohio Valley and North-western Territory, will be an event of peculiar interest, and it is the desire on the part of the commissioners in charge of the exposition to have each department full and complete, and having set aside a special department for architecture and building exhibits, very respectfully call your attention and solicit the patronage of your association, and would be pleased to assign you space for such a meritorious and interesting an exhibit as is displayed at your annual meeting now being held in this city.
Very respectfully,
J. M. BLAIR,
Chairman Department Architecture and Building.

Mr. Crapsey: Mr. Chairman, in regard to that matter I would state, being assigned to do a little missionary work on the architectural department of the Exposition, that the freight will be paid to and from Cincinnati on all contributions by the profession, by the Board of Directors of the Exposition.

Mr. Sullivan: I move that the matter be referred to the Board of Directors, with power to act. The motion prevailed.

The Chair: I have a letter from W. W. Taylor, of the Brooklyn Pottery Company, inviting the members to visit the works at any hour between 9 A.M. and 9 P.M. on Saturday.

Mr. Furber: The graduates of the Massachusetts Institute of Technology are invited to meet in the directors' room after the adjournment.

Mr. Crapsey: Mr. Chairman, the following candidates have received the approval of the members of the association:

Arnold, E. A.	57 Buhl Block, Detroit, Mich.
Anderson, P. J.	Montgomery, Ala.
Armstrong, A. J.	Birmingham, Ala.
Allen, N. J.	501 Milam street, Shreveport, La.
Buddemeyer, E.	7 E. Fourth street, Cincinnati, Ohio.
Barnum, F. S.	Cleveland, Ohio.
Barnes, J.	Joliet, Ill.
Benz, R.	Mobile, Ala.
Brown, W. R.	Cincinnati, Ohio.
Bethune, R. A.	531 Main street, Buffalo, N. Y.
Campbell, H. L.	485 Main street, Buffalo, N. Y.
Cooper, F. W.	Topeka, Kan.
Chisholm, B. G.	Birmingham, Ala.
Clark, Dillon P.	West Bay City, Mich.
Crain, Arthur	80 Griswold street, Detroit, Mich.
Cutting, A. P.	Worcester, Mass.
Coburn, F. A.	Cleveland, Ohio.
Dallas, S. C.	Salt Lake City, Utah.
Donaldson, —	45 Moffat Building, Detroit, Mich.
Elzner, A. O.	227 Main street, Cincinnati, Ohio.
Fitzner, Wm.	New Orleans, La.
Folk, F. W.	919 Olive street, St. Louis, Mo.
Forgeson, G. M.	Bessemer, Ala.
Grodavent, F. J.	Leavenworth, Kan.
Green, Lonsdale.	Anniston, Ala.
Gearing, J. V.	46 Litz Building, Detroit, Mich.
Hedge, W. S.	Salt Lake City, Utah.
Harrod, B. M.	New Orleans, La.
Holbrook, W. A.	Milwaukee, Wis.
Heiner, E. T.	Houston, Tex.
Hess, Julius	38 Buhl Block, Detroit, Mich.
Hasecoeter, J. A.	Richmond, Ind.
Hull, W. S.	Sheffield, Ala.
Hill, J. O.	Mobile, Ala.
Haupt, Oscar	Louisville, Ky.
Koch, H. C.	Milwaukee, Wis.
Leffingwell, C. A.	Shreveport, La.
Larmour, W. W.	Waco, Tex.
Mason, Geo. D.	80 Griswold street, Detroit, Mich.
Meier, Henry J.	49 Moffat Building, Detroit, Mich.
Millard, W. G.	Birmingham, Ala.
Mann, Geo. R.	St. Joseph, Mo.
McFarland, W.	Moffat Building, Detroit, Mich.
Merrill, E. L.	Des Moines, Iowa.
Otter, John	2 and 4 Clark street, Chicago, Ill.
Otter, F. J.	Dayton, Ohio.
Patton, S. M.	New Orleans, La.
Porter, C. K.	43 American Block, Buffalo, N. Y.
Porter, J. R.	43 American Block, Buffalo, N. Y.
Percival, C. R.	42 American Block, Buffalo, N. Y.
Reid, Chas. E.	Birmingham, Ala.
Roseman, R. E.	38 Buhl Block, Detroit, Mich.
Rogers, Jas. S.	Moffat Building, Detroit, Mich.
Rice, Jack.	27 Board Trade Bldg., Detroit, Mich.
Rose, Warren	Birmingham, Ala.
Reuhl, P. W.	128 West Twelfth street, Chicago, Ill.
Russell, H.	Milwaukee, Wis.
Rosseau, F. L.	Birmingham, Ala.
Sharp, Robert	Nashville, Tenn.
Smith, Wm. C.	Berry Block, Nashville, Tenn.
Sutcliffe, Jno.	Birmingham, Ala.
Siter, H. E.	cor. Third & Walnut sts., Cincinnati, O.
Smith, W. S.	Birmingham, Ala.
Smith, Sallie T.	Birmingham, Ala.
Sidel, Edward.	Birmingham, Ala.
Smith, M. L.	17 & 18 Walker Block, Detroit, Mich.
Scott, Jno.	Wayne Co. Bank Bldg., Detroit, Mich.
Scott, A. H.	Wayne Co. Bank Bldg., Detroit, Mich.
Tilden, Guy.	Canton, Ohio.

Toledano, A.	37 Carondelet street, New Orleans, La.
Thompson, L. S.	La Fayette, Ind.
Thompson, A. C.	Nashville, Tenn.
Wilson, H. R.	218 La Salle street, Chicago, Ill.
Warren, C. J.	Chicago, Ill.
Williams, W. C.	New Orleans, La.
Wells, E. W.	Wheeling, W. Va.
Walker, W. T.	Montgomery, Ala.
Willett, W. H.	Gladson, Ala.
Weathers, L. M.	Anniston, Ala.

The Chair: We will now hear the report of the Auditing Committee.
J. J. Flanders: Your committee appointed to audit the accounts of the treasurer of this association respectfully report, they have examined the account and accompanying vouchers, and find them to correspond with the report made by the treasurer.

On motion, the report of the committee was received and placed on file.

The Chair: I have a note from Mr. R. T. Brown of the New Jersey Wire Cloth Company, stating there will be a test of wire lathing on Elm street today, and inviting the members to attend.

If there is no further business before the association, the next in order is the election of officers.

Mr. Crapsey: Mr. President, I move the secretary be instructed to cast one ballot for Sidney Smith, of Omaha, as the choice of this association for president.

Mr. Sullivan: I second the motion.
The motion, on being put to vote, was carried unanimously.

The Chair: The secretary being empowered to cast the vote of the association for Mr. Smith, it seems to me this is a most admirable time for Mr. Smith to express himself.

Mr. Treat: I would suggest the chair appoint a committee of two to wait on the gentleman.

The Chair: Mr. Sullivan and Mr. Treat will be that committee.

The committee retired to the directors' room, and immediately returning with the president-elect presented him to the convention.

President-elect Sidney Smith: Gentlemen; I will not say this result was wholly unsuspected, as I understood it was the intention to put up a job on me, but I can say for this unsolicited honor, which you have conferred upon me, and a greater one I do not acknowledge could be conferred by any organization in the land—than to be the choice of both nominating committees, and elected by the unanimous vote to the first office of this honorable body. You might readily have found members of the Western Association of Architects, who, because their prominence in the profession, would have been a more worthy choice; but I can say this, you could not have found one who is more deeply interested in the welfare of the association, or who would be willing to devote more of his time, where it becomes necessary, for the promotion of the best interests of this association. I intend to bend all my energies to this end, and if I succeed in accomplishing in part my desires and intentions, you will have no occasion to say that I have been partial and have considered one member above another, but rather that I have only recognized the association as a whole. Gentlemen, again I thank you.

Mr. Adler: Mr. President, I move the secretary be instructed to cast one ballot for James F. Alexander, for first vice-president of this association.

On being duly seconded the motion prevailed.
The Chair: The secretary will now elect himself.

Mr. Rapp: As I have already held office, being last year one of the Board of Directors, and as I believe it is for the benefit of the association to have rotation in office, I move the secretary be instructed to cast one vote for W. C. Smith, of Tennessee, for second vice-president of this association.

The secretary was, on motion seconded, so instructed.

Mr. Sullivan: I wish it understood that I cannot serve in the office of secretary and I decline to be considered a candidate. I propose to devote myself to the work of the professional standard committee during the coming year, and I want no other work.

Mr. Helmers: Mr. Chairman, I move that Normand S. Patton be declared the unanimous choice of the convention, and that the secretary be instructed to cast one ballot to express this choice.

On motion, seconded, the secretary was so instructed.

Mr. Adler: As Mr. J. J. Flanders, the nominee for treasurer of the committee of which I have the honor to be chairman, has declined to be considered in that relation, in behalf of the committee I nominate Mr. J. W. Yost for the office of treasurer.

Mr. Yost: As I am not a very strong believer in rotation in office, particularly when the office has been filled with success, I would suggest the association cannot do so well as to make the present treasurer succeed himself. I therefore move the secretary be empowered to cast one ballot for Samuel A. Treat as treasurer of this association.

Mr. Yost's motion, being duly seconded, prevailed unanimously.

Mr. Treat being called upon for a speech said, "The treasurer is now ready to receive dues for 1888."

The Chair: Gentlemen, the Board of Directors is next to be balloted for. You will proceed with your balloting.

Mr. Adler: While the balloting is in progress, I would move that this convention extend a vote of thanks to the Association of Ohio Architects, for the pains taken to provide for the work of this convention; also to the Committee on Entertainment, also to Messrs. McDonald, Schoenberger and Vail, and that the secretary be requested to send a proper acknowledgment to these gentlemen for their kind invitation and hospitality.

Mr. Rapp: Mr. President, I would move to amend Mr. Adler's motion by including a vote of thanks to the president of the Art Museum.

The motion so amended prevailed.

Mr. Adler: I would also think the association would like to hear from the secretary as to the action of the Board of Directors on the matter of honorary members.

Secretary Alexander then read the following as the list of honorary members reported by the Board of Directors.

Henry Whitestone, of Louisville, Kentucky, proposed by C. A. Curtin. Thos. U. Walter, of Philadelphia, Pennsylvania, proposed by Chas. Crapsey. John M. Van Osdel, Sr., of Chicago, Illinois, and A. J. Bloor, of New York, proposed by D. Adler.

Mr. Adler: I move you, Mr. President, that these appointments to honorary membership be confirmed by the association.

The motion, being seconded and put to vote, was carried unanimously.

Mr. Adler: Mr. President, I also move that the incoming Board of Directors and the incoming secretary be directed to draw up a proper set of resolutions expressive of the feelings of the members of this association upon the demise of Thomas Ustic Walter, architect of the United States Capitol building, and for so many years the distinguished president of the American Institute of Architects. This is a matter in which we all feel deeply, and I think that further words are uncalled for. I would move in this connection that the secretary be requested to engross the resolutions and send them to the family of Mr. Walters, and also to spread them on the records of this association.

The incoming Board and incoming secretary were so instructed.

The Chair: The tellers are ready to report the result of the ballot for directors.

Mr. Treat reported the following list as having a majority of the votes, and constituting the Board of Directors elect: J. W. Root, Chicago, Ill.; W. R. Forbush, Cincinnati, Ohio; J. J. Flanders, Chicago, Ill.; C. F. Schweinfurth, Cleveland, Ohio; George B. Ferry, Milwaukee, Wis.

The Chair: There is one matter I would like to bring to the attention of the convention. It has been found that the committee which has been appointed to take charge of the drawings of the exhibit have had an amount of labor to perform beyond its reasonable capability. The question arises whether the president has a right to change the number of this committee. Is there any objection to enlarging this committee?

Mr. Patton: Do the by laws provide for the existence of this committee?

The Chair: No. The committee was appointed last year on a precedent which has been extant since the organization of the association. In other words, it is an unwritten law of the association that provides for the appointment of this committee. I simply raised the point, and ask if there is any objection to increasing the number of this committee. If any one has any objection to make, I shall be pleased to listen to them, otherwise I will leave the matter of drawings for the exhibit to the incoming president.

There is one matter before the convention which has not yet been brought up, and which is now in order. This is the report from Mr. Helmers on the collection of legal decisions.

Mr. Adler: Mr. President, before that report is heard, I think the committee to gather statistics on competitions should be discontinued. It was a committee appointed at the urgent request of the ex-president of the association, from which there never has been any report.

Sidney Smith: Mr. McLean is just in receipt of a letter from Mr. Illsley, the chairman of that committee, in which his non-attendance here, today, is accounted for by the death of his father. Mr. Illsley also mentions the fact that he has received letters from several parties, expressing general information, but none of them containing statistics desired. He expresses regret, on his part, that the members of this committee have not been active in the work.

Mr. Adler: That has been the custom with the committees of this association, to let the chairman do all the work.

Mr. Yost: As a member of that committee to collect statistics on competition, I would say that I had written, and was waiting to hear from Mr. Illsley in regard to the work expected.

Mr. Adler: I withdraw my motion. I presume while the members of that committee were waiting to hear from Mr. Illsley, Mr. Illsley was waiting to hear from the committee all that time. I think it is well enough to continue this committee until we know what they want to do, and until some kind of a report is made.

The Chair: We will now listen to the report of the Committee on Legal Decisions.

C. C. Helmers: Mr. President and gentlemen of the Western Association, in behalf of the committee appointed at the last convention to collect statistics on legal decisions, I have simply to report progress. In going into the matter I found the subject to be much larger than I had anticipated. It has taken a whole year to find out what we wanted to get. I have received reports from six out of nineteen states and territories represented in the committee: H. P. McDonald, of Kentucky; H. C. Clas, of Wisconsin; T. H. Morgan, of Georgia; B. Vonnegut, of Indiana; L. H. Sullivan, of Illinois; G. L. Fisher, of Nebraska. Of the reports received they were not quite as full as I wished, and expected the gentlemen understood fully what was wanted. I would suggest that the papers that have accumulated be turned over to a similar committee to work on the subject the next year, and furthermore, that the chairman of the committee be empowered to appoint committeemen in the states where he finds those appointed by the president are not doing their work.

The Chair: The chairman has a right to appoint a committeeman where he finds those already appointed fail to serve.

Mr. Sullivan: Mr. President, I think this committee is not a proper committee for this association. As a member of this committee, in making a slight beginning I soon found myself incompetent to handle the subject. I resorted to my attorney to consult him in regard to it. He asked me how far I wished to go back; to take the decisions of one year, or two years, or did I wish to be as far-reaching as when Illinois was a territory? I am opposed to the appointment of this committee. I think if the association wishes any information on legal decisions, it ought to employ a lawyer to do the work, and have it printed for the benefit of the profession. I have in my mind a member of a legal firm in Chicago who has expressed a desire to occupy his leisure moments in writing a book on building laws. If it is the desire of the association, I could approach him on the subject.

The Chair: I understand, Mr. Sullivan, it will be necessary to act on the report of this committee before discharging it.

Mr. Helmers: I think this way about it. I started in last year to do this work, and while I have no desire for any more labor, if the president thinks this is the way we want to do it, I am perfectly willing to pay a lawyer to do it. The only question about the plan—no one lawyer covers the territory our association wishes covered. The object of the committee, it seems to me, is not so much to get legal advice as it is to get a general collection of decisions, so that it would be valuable in any part of the territory. I fully understand that an architect cannot cover the ground as fully as a lawyer could, but I think the sub-committees in each state could get such legal assistance as they feel they require, and should be willing to spend what little money it would cost to get it themselves.

Mr. Sullivan: I don't think it would be right for individual members to spend their money in that way, and I don't think the association would be satisfied to have them. I think it is very desirable we should have a text book that will be valuable to the profession, and I would like to hear the expressions of the members in reference to it.

The Chair: The question is on the reception of the report of the committee.

Mr. Sullivan: I move the report be accepted and committee discharged.

Mr. Adler: I believe that in an association like this there should be a policy, and that when any one is found anxious to do a certain specific work, he should be given the opportunity to do it, and that no obstacle should be put in his way. I have had experience on committees similar to that of Mr. Helmers', and I have been chairman of those committees, and there was very little work done by the other members of them. I think if Mr. Helmers has found something he should be permitted to go on. It appears the decisions of the courts of first jurisdiction do not find their way into the law reports unless they are supposed by the editors of the law journals to be of importance to the legal fraternity. All we read of in the higher courts is the case of Johnson vs. Thompson, without giving any of the details, and there is no man, as attorney, in Chicago or anywhere else, can learn from the reported case what the decision of the court of the first jurisdiction of the case was. The only way that can be obtained is by having a large committee that will take an interest in the matter. It is difficult for us to get at the reports of even the higher courts to get the precise information we want. Generally the technical point is involved in phraseology almost incomprehensible. I think if Mr. Helmers' committee is continued it would do some very good work.

Mr. Sullivan: I understood a new committee was to be appointed. I will say my experience the past year was that what I expected I was to do was to get the decisions of the year the committee was appointed. That was a difficult part of the business. I held back my report a month or two before I could get one to report. The only way information of this character can be got successfully is to watch the daily papers every way, which would take a great deal of time. While I do not deprecate the work, I think it can be done more satisfactorily in legal hands. I doubt very much that an architect is the proper person to draw deductions, as he has not a legal mind. This is my point.

Mr. Helmers: My idea, Mr. Chairman, of the decisions the committee are expected to collect are not those of the passing year, but of the previous year, so there is no trouble about getting decisions. As far as my anxiety to do the work, as Mr. Adler puts it, is concerned, I will say I dislike to give up any work upon which I engage, but always feel like carrying it on towards a successful accomplishment.

Mr. Patton: It seems that it might be possible to combine both of these ideas by continuing the committee, and let them collect the decisions of the past and current years, and give them power to employ legal assistance, and if they think it is desirable to go back further, to employ some lawyer to collect and dissect the decisions. I move that the report of the committee be accepted, the committee continued, and that they be authorized to employ legal talent at the expense of the association, the amount of money to be expended to be judged by the Board of Directors.

Mr. Helmers: I think we can collect a great deal of information ourselves; and then, if it is necessary, we can employ the services of a lawyer in compiling it. I don't think it is necessary for this association to go to any expense in the collection of decisions.

Mr. Yost: As a member of that committee from Ohio, I wish to say when I found the kind of work before us I went to see an attorney. I expected the work was to go back to the beginning of the state. He said the decisions connected with building matters that had been before the Supreme Court of Ohio would fill a volume, and it would take a first-class attorney to collect the information. It is the decisions of the higher courts that are taken as precedents. No attention is paid to the decisions of the lower courts, and it is these decisions which would be of value, if they were in the form of a text book, but I don't think the association wants to pay for getting one up. I think the committee ought to be continued, to allow Mr. Helmers to obtain whatever he can get in this direction for the benefit of the members of the association. If he is not able to do a great deal of good, he may do a little, but I don't believe we should go to any great expense, and I think Mr. Patton's motion is a very good one.

The Chair: Will you please state your motion again?

Mr. Patton: I move, Mr. President, that the report of the committee be accepted and the committee be continued, and that they be authorized to employ legal assistance if it is advisable, in their judgments, to be paid for by the association, but that no pecuniary obligations shall be made without the previous consent of the board of directors.

Mr. Sullivan: I withdraw my amendment.

Mr. Patton's motion then being put before the convention was adopted.

The Chair: Did your motion mean in continuing the committee, that it be continued as at present formed?

Mr. Patton: Not necessarily, Mr. President. I would like to have the question of draftsmen brought before the committee on a code of ethics—to have them take some action in regard to draftsmen who, while in the employ of architects and receiving a salary from them for their services, do work on their own account after office hours, signing themselves as archi-

fects—doing their work at their homes; having no office expenses, they can do cheap work, very much less than architects. There should be some provision made to meet this evil in the profession.

The Chair: I think this will come before the committee.

Mr. Sullivan: I would like to say that I shall give the code of ethics all my leisure time during the next year, and you will find that we shall attend to the business thoroughly. I don't want any other work.

Mr. Patton: I simply suggest that topic to the committee.

The Chair: Gentlemen, is there any further business? If not, we will proceed to the appointing of committees. The first committee which has been appointed from year to year is the committee on professional requirements. This was a committee originally of three. In view of the fact that a large committee has been appointed to virtually take charge of this business, is it your will to continue this committee?

Mr. Sullivan: The resolution instructing and empowering the board of directors to base their proceedings hereafter on the report of the committee on raising the standard of professional requirement, I think does away with continuing that committee.

The Chair: The Committee on Uniform Contracts and Specifications is continued.

The Committee on the bill concerning the office of Supervising Architect United States Treasury Department is continued.

The Committee on Metrical Measurement is continued.

The Committee to Organize State Associations. Do you wish this committee continued in its present form?

Mr. Patton: Has that committee reported?

The Chair: Yes. This committee will be left to be attended to by the incoming president. The Committee to Collect Statistics on Competitions is continued.

The Committee to Collect Legal Decisions Relating to Building Interests is continued.

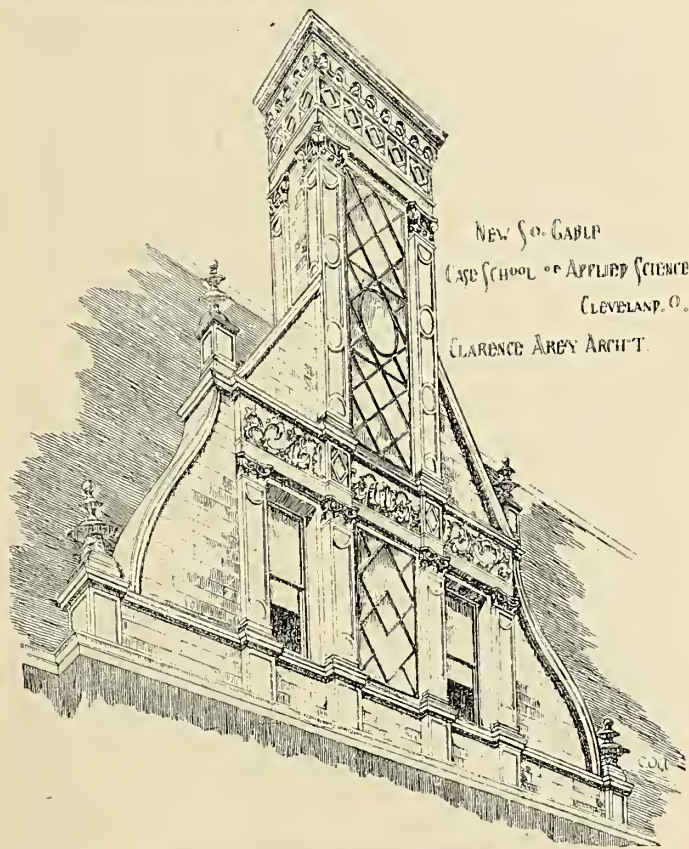
The Chair: The next business before us to be decided is the place for the meeting of the next convention.

Mr. Arey: As both committees have named Chicago in their reports, I move that Chicago be designated as the place for holding the next convention.

Mr. Arey's motion, being duly seconded, was carried by a unanimous vote.

Mr. Helmers: I move you that the thanks of the association be expressed to the architects of Cincinnati for their cordial reception; also to the Association of Ohio Architects. Carried.

On motion, the convention adjourned to meet in Chicago on the third Wednesday of November, 1888.



STATE ASSOCIATION REPORTS.

[The reports are given in full as received by Secretary Alexander from the secretaries of the associations. A general abstract was read before the convention by the secretary.]

The Illinois State Association of Architects sends the following report:

The Illinois State Association of Architects was organized January 16, 1885.

The following officers were elected for the years 1887 and 1888:

President, Samuel A. Treat; first vice-president, L. D. Cleveland; second vice-president, Clarence L. Stiles; secretary, Robert C. Berlin; treasurer, W. W. Hill.

Executive Committee, L. H. Sullivan, chairman; John W. Root, W. W. Clay, Alfred Smith.

Members in good standing, D. Adler, F. Ahlschlager, A. Blumenthal, D. H. Burnham, E. Bauman, F. Baumann, Geo. Beaumont, Robert C.

Berlin, W. W. Boyington, A. M. F. Colton, H. I. Cobb, L. D. Cleveland, W. W. Clay, A. Druiding, J. J. Donnellan, Geo. H. Edbrooke, J. J. Egan, J. J. Flanders, H. L. Gay, C. O. Hansen, H. M. Hansen, H. W. Hill, J. H. Huber, L. G. Halberg, Wm. Holabird, W. F. Leshner, Otto H. Matz, J. Otter, C. M. Palmer, N. S. Patton, O. J. Pierce, L. G. Quackenboss, H. Raeder, John W. Root, M. Roche, S. M. Randolph, Alfred Smith, Clarence L. Stiles, L. H. Sullivan, L. J. Schaub, Wm. Strippleman, F. B. Townsend, S. A. Treat, G. Vigeant, J. M. Van Osdel, Jr., C. J. Warren, F. M. Whitehouse and J. L. Silsbee, of Chicago, and J. Mulvey, of Aurora.

ROBERT C. BERLIN, Secretary.

The Kentucky State Association of Architects sends the following:

I have the pleasure to submit herewith a report showing the condition of progress made by our association since its organization. On January 22, 1887, a meeting was held at the office of McDonald Brothers, this city, to form a State Association of the Western Association of Architects.

The association was duly organized and the following are its officers: H. P. McDonald, president; Henry Wolters, first vice-president; Mason Maury, second vice-president; O. C. Wehle, secretary and treasurer. The directors are H. P. McDonald, Mason Maury, Henry Wolters, O. C. Wehle, C. J. Clark. The members are, from Louisville, C. J. Clark, W. J. Dodd, Mason Maury, C. A. Curtin, Oscar Haupt, Donald McDonald, Kenneth McDonald, D. X. Murphy, H. P. McDonald, Chas. P. Meyer, Henry Webb, C. H. Redin, Henry Wolters, O. C. Wehle, N. O. Wilson; from Lexington, Ky., H. L. Rowe. R. C. McLean, Chicago, honorary member.

There are now applications from five non-resident architects, in various parts of the state, whose applications are being considered.

The architects of this city are represented by a membership of fifteen out of a total number of seventeen architects in this city.

The meetings are held monthly, in accordance with the constitution and by-laws, a copy of which is appended.

The constitution and by-laws of the Louisville Chapter of the State Association will be presented for adoption at the next meeting.

The association will also consider the proposed new building law for the city of Louisville.

Respectfully submitted,

O. C. WEHLE, Secretary.

The Architectural Association of Iowa, sends the following report:

The officers of the Architectural Association of Iowa, for the year 1887, are: President, E. H. Taylor, Cedar Rapids; vice-president, G. G. Baldwin, Sioux City; secretary, F. D. Hyde, Dubuque; treasurer, E. S. Hammatt, Davenport.

Members in good standing, are I. S. Blake, W. F. Hackney, E. H. Merrill, C. H. Lee, of Des Moines, W. K. Ball, of Creston, W. A. Fulkerson, H. S. Joslyn, E. H. Taylor, of Cedar Rapids, G. G. Baldwin, F. D. Hyde, Fred Herr, Guido Beck, of Sioux City, E. S. Hammatt, F. G. Clausen, of Davenport, Wm. Ward, of Council Bluffs, J. C. Wykoff, of Keokuk.

F. D. HYDE, Secretary.

The Western New York State Association of Architects held its organization meeting at Powers Hotel, Rochester, Saturday October 29.

The following resolution was passed:

Resolved, "That the secretary be instructed to send a list of the charter members of this association to the secretary of the Western Association of Architects, with formal notification of the formation of the Western New York State Association of Architects, under the rules of the Western Association of Architects."

With an initial membership of thirty-one; From Rochester thirteen as follows: Otto Block, John R. Church, Chas. F. Crandall, Jas. G. Cutler, O. W. Dryer, Jay Fay, Orlando K. Foote, W. Foster Kelly, Thomas Nolan, Geo. T. Otis, W. H. Richardson, Louis P. Rogers, W. C. Walker; from Buffalo eight, Louise Bethune, R. A. Bethune, H. L. Campbell, W. W. Carlin, Edward A. Kent, C. R. Percival, Cyrus K. Porter, Jesse R. Porter; from Syracuse six, Geo. W. Baxter, Jr., E. M. Buell, C. E. Colton, Ellis G. Hall, J. H. Kirby, Asa L. Merrick. From Elmira three: Otis Dockstader, J. Q. Ingham, J. H. Pierce.

From Fredonia one: A. E. Curtis.

R. C. McLean, of Chicago, was made an honorary member.

Meetings will be held on the second Tuesday of October, February and June, and no two consecutive meetings will be held in the same city.

In consideration of the fact that New York state contains over 600 architects, the attendance at this first state meeting seems small, but it must be remembered, that the initiatory steps toward this organization were taken by the Buffalo Architectural Society, and that to avoid unpleasant consequences, circulars were sent only to such architects as were known personally and favorably to members of the Buffalo Society, and the final invitations were sent only to those who replied to the first circular.

W. W. CARLIN, Secretary.

The secretary of the Architectural Association of Minnesota sends the following report:

Officers for 1887: president, E. P. Bassford; vice-president, Geo. M. Goodwin; secretary, F. G. Corser; treasurer, E. E. Joralemon.

Members in good standing: From St. Paul, E. P. Bassford, A. F. Gauger, W. W. Hee, D. W. Millard, E. W. Uerici, C. A. Wallingford, James K. Taylor, Charles E. Joy; From Minneapolis, F. G. Corser, Geo. M. Goodwin, W. H. Hayes, P. Hodgson, Fred. Kees, F. B. Long, George W. Orff, W. C. Whitney, C. F. Struck, E. E. Joralemon, Wm. A. Hunt, T. W. Kelley; from Mankato, H. C. Gerlach; from St. Cloud, J. E. Hussey; President of the Western Association of Architects; President of the American Institute of Architects; President of the St. Paul Contractors and Builders Board of Trade; Secretary of St. Paul Contractors and Builders Board of Trade; President of the Minneapolis Hennepin Club; Secretary of the Minneapolis Hennepin Club.

F. G. CORSER, Secretary.

The Association of Ohio Architects submit the following report:

The Fourth Semi-Annual Meeting of the Association of Ohio Architects assembled at the parlors of the Weddell House, Cleveland, Ohio, July 21, 1887.

The Executive Committee reported the election of the following to membership in the Association: L. Boucherlee, Youngstown, Ohio; Frank J. Otter, Dayton; D. L. Stein, Toledo; Wm. R. Brown, Cincinnati; A. M. Smith, John Eisenmann, Edward Schwade, Cleveland.

The president announced an intermission of a few minutes during which the members could pay their dues.

After the meeting was again called to order the treasurer reported about \$280 in the treasury, and \$20 due from Cincinnati which could be counted upon. There was a resolution passed at the January meeting that such members as had not paid should have six months to pay it in.

There was some discussion during which the action of the officers in dropping from the rolls the names of those who had not paid their dues was approved of.

The report of the treasurer was accepted.

The roll was called and the following is a full list of members at this date:

Akron: George Kramer, F. O. Weary; Canton: Guy Tilden; Chillicothe: Charles B. Cook, J. F. Cook; Cincinnati: W. M. Aiken, Jas. W. McLaughlin, A. C. Nash, H. E. Siter, Sam'l Hannaford, Edwin Anderson, Wm. R. Brown, Edwin Buddemeyer, Chas. Crapsey, S. E. Des Jardins, Gustave Drach, Walter R. Forbush, W. W. Franklin, I. Green, Geo. W. Rapp, E. G. Reuckert, T. E. Richter; Dayton: S. R. Burns, Frank J. Otter, Luther Peters, C. I. Williams; Hamilton: M. Reutte; Tiffin: T. K. Hewitt; Toledo: N. D. Bacon, Bernhard Becker, E. O. Fallis, D. S. Stein; Youngstown: L. Boucherlee, W. B. Ellis, A. Kanengeiser, Herman Kling, C. H. Owsley; Zanesville: H. C. Lindsay; Cleveland: C. O. Arey, F. C. Bate, F. S. Barnum, F. A. Coburn, F. E. Cudell, John Eisenmann, J. N. Richardson, Edward Schwade, C. F. Schweinfurth, A. M. Smith; Columbus: J. M. Freeze, S. J. Hall, J. S. Harris, E. W. Hart, C. A. Stribling, G. H. Martzel, J. A. Kremer, H. A. Linthwaite, J. W. Yost; Chicago: honorary member, R. C. McLean.

The matter of S. J. Hall, member from Columbus, who was reported as having been doing contract work was brought up and referred to the Executive Committee.

Mr. Yost, chairman of the Committee of Statutory Revision and the Law for Licensing Architects, reported no progress of a definite character. The fight was being kept up with a kind of running fire. It was before the legislature last year, and it will be brought up before the next legislature.

The Committee on Formation of Chapters reported no new chapters.

Mr. Rapp, from Cincinnati, reported: There are now nineteen members, several members having left the city. The chapter meets monthly, and on special occasions. Efforts have been made to have the coming competitions for city hall and armory conducted according to the schedule adopted by the Western Association, without success so far, though the time has been extended. Arrangements are made for the entertainment of the Western Association next November, and efforts will be made to make the visit agreeable to all.

Mr. Fallis, of Toledo, reported the prospect for the formation of a chapter in a few months. Members from other cities could report no progress.

Mr. Weary, chairman of the Committee on Entertainment of the Western Association, reported very little action had been taken so far. A trip south had been talked of, but that might be interfered with by the Inter-State Commerce Act.

A subscription list had been started by the Committee on Entertainment and had reached the amount of \$460, a thousand would be needed. There would be other members of the association to see who were not here today. The committee will get together as the time approaches and lay out a programme.

After some discussion of this subject, the excursions that might be taken, etc., a resolution was passed that the committee be authorized to draw upon the treasury the sum of \$200 toward the entertainment of the Western Association of Architects.

The matter of the change of the constitution was brought up, and it was decided to have the meetings annually hereafter instead of semi-annually. After some discussion an informal vote was taken which showed August to be the month preferred. And after further discussion a resolution, as offered by Mr. Yost was seconded and passed, making Article I of the By-Laws hereafter read as follows:

"The regular meetings of this association shall be annual and occur on the third Thursday of August unless otherwise ordered by the Executive Committee, thirty days' notice being given, the place to be chosen at each regular meeting."

It was moved by Mr. Yost, and carried, that the present officers hold their offices until the next annual meeting in August, 1888, and that that meeting be held in Cleveland.

Mr. Forbush, Inspector of buildings in Cincinnati, was called upon to report in regard to the building law.

He reported some trouble in enforcing it, but that it was a very good law. Some points needed improvement upon, and then he heartily recommended it for adoption for Cleveland and Toledo. There has been some talk of repeal, but it would be easy to remedy the objectionable features.

Mr. Forbush will be glad to go over the law with any of the architects or builders in Cleveland, who are interested in the matter, and who desire a good building law. The only change necessary to have this state law apply to Cleveland and Toledo would be to have it amended so as to apply also to the class and the grade of those cities.

Copies of the law will be furnished on application to Mr. Walter R. Forbush, Cincinnati, Ohio.

F. A. COBURN, Secretary.

The Wisconsin State Association of Architects sends the following:

But little has been done during the first year of our association, and but little is there to report. Such as it is I herewith submit my report as secretary.

Some time since I sent you a report of the organization and first meetings. On January 3, 1887, the Wisconsin State Association of Architects was organized at the rooms of the Milwaukee local association.

There had been issued some time previously a circular from the secretary of the Milwaukee Association, addressed to all the architects of good standing in the state association, there to be present at the above date for the purpose of forming a state organization; as a result there were present but three architects from Milwaukee and none from the state outside.

A Constitution and By-Laws were adopted and officers elected. The secretary was instructed to send printed copies of the Constitution and By-Laws and to further urge members of the profession throughout the state to join the association.

A committee on legislation was appointed to take such measures as were deemed best to have the lien law of the state so amended as to include the services of architects.

Since then, monthly meetings have been held, when a quorum could be brought together, papers have been read and discussions held. Other architects in the city have become members and four from other cities have joined. The Committee on Legislation were successful, and the lien law was amended as desired.

This association has decided that it is better policy—for the present at least—to avoid the adoption of all rules or restrictions, that would interfere with the manner in which its members may conduct the business of their offices. Hence no schedule of charges has been adopted nor has the matter of competitions been touched upon in its meetings.

The following is a list of members and officers:

E. Townsend Mix, president, Milwaukee; James Douglass, vice-president, Milwaukee; Wm. Waters, vice-president, Oshkosh; Howland Russell, secretary and treasurer, Milwaukee; D. M. Hartau, Green Bay; H. C. Koch, H. P. Schwetzkzy, Geo. B. Ferry, W. A. Holbrook, C. F. Ruigee, Wm. Davelaar, Alf. C. Clas, Chas. Kirchoff, E. V. Koch, F. Velguth, Milwaukee; Prof. A. D. Conover, L. F. Porter, Madison.

The lien law as now amended, published May 3, approved April 12, 1887, reads as follows:

Every person, who, as principal contractor, architect, civil engineer or surveyor, performs any work or labor, furnishes any materials or prepares any plans or estimates for, in or about the erection, construction, repairs, protection or removal of any dwelling house, or other building, or of any machinery erected or constructed so as to be or become a part of the freehold, upon which it is to be situated, or of any bridge, or in the filling up of any water lot, or the construction thereon, or any wharf or permanent erection or in the dredging of the channel in front of such water lot, or in the digging or constructing, any well or fountain, or in digging or repairing, any fences upon land, or doing manual thereon, shall have a lien thereupon, and upon the interest of the owner of such dwelling house, building, machinery, bridge, wharf, erection thereon, well, fountain or fence, in and through the upon which the same is situated, or of the person causing such manual labor to be done, and upon the water lot so filled or in front of which such dredging is done, not exceeding forty acres; or if within the limits of an incorporated city or village, upon the piece or parcel of land used or designed for use in connection with such dwelling house, building, machinery, bridge, wharf, erection thereon, well, fountain or fence, or upon such water lot or land, on which manual labor is done, not exceeding one acre. Such lien shall be prior to any other lien, which originates subsequent to the commencement of such construction, repairs, removal, or work aforesaid, of or upon such dwelling house, building, machinery, bridge, wharf or erection thereon, well, fountain, fence, water lot or land, and shall also attach to and become a lien upon the real property of any person on whose premises such improvements are made, such owner having knowledge thereof and consenting thereto, and may be enforced as provided in this chapter. In case any person shall order or contract for the purchase of any machinery to be placed or connected to or with any building or premises, and such person not having an interest in such building or premises in or connected with which such machinery is placed, sufficient for a lien, as provided for in this chapter, so secure payment for said machinery, the person furnishing such machinery shall have and retain a lien upon such machinery, and shall have the right to remove from such building or premises such machinery, in case there shall be a default in the payment for such machinery when due, leaving such building or premises in as good condition as they were before such machinery was placed in or on the same.

HOWLAND RUSSELL, Secretary.

The Tennessee State Association of Architects made the following report:

The Tennessee State Association of Architects was organized at Nashville on February 24, 1887.

The following is the list of officers elected for the current year:

President, Wm. C. Smith, Nashville; secretary, T. L. Dismukes, Nashville; treasurer, G. W. Thompson, Nashville; vice-presidents, J. P. Williamson, Nashville; J. B. Cook, Memphis; J. F. Bowman, Knoxville. Board of Trustees, P. J. Williamson and R. G. Rosenplaenter, with the secretary, treasurer and the president.

Membership: R. G. Rosenplaenter, C. C. Burke and J. B. Cook, of Memphis; J. F. Bowman, of Knoxville; the above joined by letter; Wm. C. Smith, Geo. W. Thompson, P. J. Williamson, Jno. C. Smith, H. C. Thomson, Ed. Laurent, Robert Sharpe and T. L. Dismukes, of Nashville.

Please find inclosed a copy of by-laws, which were published by R. C. McLean in the INLAND ARCHITECT.

We had the honor of his presence and assistance in our organization, and his promise to be with us at our next annual meeting, to be held at Memphis on the third Thursday in February.

On the whole, the slim attendance and little interest manifested was a disappointment to Nashville architects, but we hope to interest all of our profession in the state. It has been a very busy year with us, preventing proper attention requisite to a full organization.

T. L. DISMUKES, Secretary.

STANDING COMMITTEES.

President Smith has revised and appointed committees for the year as follows:

Committee on Discipline—The Board of Directors.

Committee on Raising Standard of Professional Requirements for Membership—As appointed by the chair in convention, names already given.

Committee on Uniform Contracts and Specifications—Committee forming State Association, as before.

Committee on Bill Governing Office of Supervising Architect United States Treasury Department—Committee stands as before.

Committee on Metrical Measures—Normand S. Patton, Chicago, Ill.; T. B. Annan, St. Louis, Mo.; Chas. Crapsey, Cincinnati, Ohio.

Committee on Statutory Revision—Daankmar Adler, Chicago, Ill.; Geo. L. Fisher, Omaha, Neb.; F. G. Corser, Minneapolis, Minn.; E. H. Taylor, Cedar Rapids, Iowa; E. O. Fallis, Toledo, Ohio; Albert Cobby, Yankton,

Dak.; Chas. K. Ramsey, St. Louis, Mo.; John M. Donaldson, Detroit, Mich.; C. A. Curtin, Louisville, Ky.; Geo. B. Ferry, Milwaukee, Wis.; Jas. F. Alexander, Lafayette, Ind.

Committee to Organize State Associations—Jas. F. Alexander, Lafayette, Ind.; H. P. McDonald, Louisville, Ky.; Geo. W. Thompson, Nashville, Tenn.; J. G. Haskell, Topeka, Kas.; F. C. Bruce, Atlanta, Ga.; John Sutcliffe, Birmingham, Ala.; E. W. Welles, Wheeling, W. Va.

Committee on Drawing for Exhibition at next Convention—The Board of Directors.

Committee of Statistics on Competitions—Chas. E. Illsley, St. Louis, Mo.; G. W. Field, Omaha, Neb.; E. H. Taylor, Cedar Rapids, Iowa; Geo. W. Rapp, Cincinnati, Ohio; J. W. Yost, Columbus, Ohio.

Committee to Collect Legal Decisions relating to Building Interests: Missouri—Chas. C. Helmers, Jr., St. Louis; Adriaance Van Brunt, Kansas City; T. B. Annan, St. Louis.

Kentucky—C. A. Curtin, Louisville; H. P. McDonald, Louisville; Mason Maury, Louisville.

Tennessee—Wm. C. Smith, Nashville; Jas. F. Baumann, Knoxville; Chas. C. Burk, Memphis.

Minnesota—F. G. Corser, Minneapolis; G. M. Goodwin, Minneapolis; D. W. Millard, St. Paul.

Texas—S. A. J. Preston, Austin; James J. Kane, Fort Worth; N. J. Clayton, Galveston.

Nebraska—G. L. Fisher, Omaha; Geo. W. Field, Omaha; Louis L. Mendelshon, Omaha.

Michigan—John M. Donaldson, Detroit; Dillon P. Clark, West Bay City; Jack Rice, Detroit.

Illinois—Fred Baumann, Chicago; R. C. Berlin, Chicago; Wm. Holabird, Chicago.

Indiana—B. Vonnegut, Indianapolis; J. W. Reed, Evansville; J. F. Wing, Ft. Wayne.

Ohio—J. W. Yost, Columbus; E. O. Fallis, Toledo; S. E. Des Jardins, Cincinnati.

Kansas—J. G. Haskell, Topeka; E. T. Carr, Leavenworth; A. W. Haywood, Wichita.

Wisconsin—Geo. B. Ferry, Milwaukee; H. C. Clas, Milwaukee; W. A. Holbrook, Milwaukee.

Iowa—E. H. Taylor, Cedar Rapids; F. D. Hyde, Dubuque; E. S. Hammatt, Davenport.

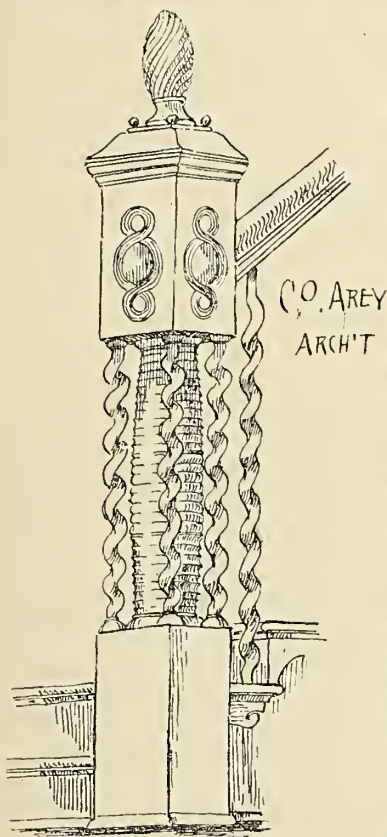
Georgia—F. C. Bruce, Atlanta; A. McMurphey, Augusta; F. C. Morgan, Atlanta.

New York—W. W. Carlin, Buffalo; Louise Bethune, Buffalo; J. G. Cutler, Rochester.

Dakota—Albert E. Cobby, Yankton.

California—Eugene L. Calkins, Los Angeles.

Louisiana—Thomas Sully, New Orleans.



CONVENTION NOTES.

"Uncle" Henry Whitestone, of Louisville, the oldest architect in Kentucky, was made an honorary member of the Western Association of Architects.

James E. Wolfe, editor of the *California Architect and Building News*, was present. He is a native of Baltimore, and went to California in 1851. This was his first trip east.

John Moser's water color of the Detroit custom house is a masterpiece. It is, from an art standpoint, probably the most studied ever produced by an architect in this country.

A communication was received from Captain J. M. Blair, of the Centennial Board of Exposition Commissioners, asking for coöperation of the Western Association in making exhibits at the Centennial Exposition.

A feature of the entertainment provided the visiting architects was a drive, in which there were twenty carriages and a four-in-hand, and the turnout was said to have been one of the most imposing of its kind seen in Cincinnati.

At the invitation of Mr. R. T. Brown, of the New Jersey Wire Cloth Company, the architects attended a test of fire-proof wire

lathing, a house having been built and set on fire for the purpose. While inspecting the fire the enterprising gentleman in charge took a photograph of the assembly.

The only stenographer in the convention was employed by THE INLAND ARCHITECT, the Western Architect Association arranging with that journal for a copy of its report. This is in strong contrast with the convention of a year ago, when nine or more journals were represented, and four stenographers were employed.

Among the many private entertainments enjoyed by the visitors was a dinner given by Architects William Martin Aiken and James W. McLaughlin, at the University Club, to a number of Chicago visitors. It was a veritable

able "round-table." Twelve covers were laid, and the absence of set speeches and the presence of some of the best of story-tellers, made it a happy, jovial, long-to-be-remembered occasion.

The best report of the convention by Cincinnati dailies was made by the *Times-Star*. This paper exhibited considerable enterprise, and its representative, Mr. N. P. Runyan, who has charge of the real estate and building department, was indefatigable in his efforts to publish "all the news." He was honored by a seat in the four-in-hand that carried the officers of the association in the drives about the city.

Messrs. McDonald, Schoenberger and Vail, of Clifton, threw open their spacious mansions for inspection by the visiting architects. While the residences of the former gentlemen were well spoken of from an architectural standpoint, that of Mr. Vail was pronounced the most homelike, even the white and gold drawing-room, with its silk-covered tables and screens, gave one a sense of use rather than ornament. The architects were thoroughly sensible to the honor conferred by these gentlemen and their recognition of the honorable body they entertained.

The Chicago Architectural Sketch Club.

THE second annual banquet of the Chicago Architectural Sketch Club took place Monday evening, November 14, at the Builders and Traders' Exchange. The same evening was the occasion of the opening of the club's annual exhibition of drawings.

Among the invited guests were the following: W. L. B. Jenney, James John, Paul Lautrup, Jno. K. Allen, Matthew Benner, Alexander G. Murray, Oliver Sollett, George H. Fox, E. A. Thomas, D. G. Phimister, B. H. Brown, M. Emery, of St. Paul, C. U. Trowbridge and others.

The following members were present: George Beaumont, W. G. Williamson, C. W. Trowbridge, M. H. Church, M. G. Holmes, W. B. Mundie, F. R. Hirsche, R. F. Sollett, E. J. Wagner, F. L. Linden, R. B. Williamson, R. E. Schmidt, T. O. Fraenkel, C. F. Jobson, James Grundy, W. R. Gibb, O. C. Christian, A. C. Berry, R. H. Denell, C. A. Kessell, Paul Muller, Frank Lively, Arthur Niemi, F. L. Ellinger, O. C. Smith, J. A. Miller, George A. Schoenberg, A. W. Hompe, H. F. Hazleton, Charles Dodge, Fred Keppler, W. B. Lord, R. C. McLean and others.

At about fifteen minutes past nine the company found their places, which were designated by a card, about five by eight inches, bearing a beautiful design emblematic of their profession, and in the center of which was the guest's name. The design was sketched by Mr. Linden.

President Beaumont occupied the place of honor, with Mr. E. A. Thomas, of the Builders and Traders' Exchange Board of Directors, on his right and Mr. W. G. Williamson, secretary of the sketch club, on his left.

President Beaumont, after bidding those present a hearty welcome, gave a brief resume of the club's labors and aims. "From a small beginning," he said, "it had developed into a well-organized, useful and artistic club. The aims of the club were mutual improvement and the advancement of the members to a higher standard of mutual attainments. The club is conducted on broad cosmopolitan principles, and any architectural draughtsman or worker in the allied arts, of integrity, honor and sobriety can become a member on the presentation of an initiation sketch of sufficient merit to pass an examination by the executive committee. We have among our honorary members architects of high standing, who have practiced their profession in this city for years. Our club nights are devoted to sketching, and other evenings to the reading and discussion of papers on various subjects relating to architecture." In concluding his remarks he told the junior members that leisure hours were better and more ennoblingly spent in the pursuit of art than over the billiard table, and admonished them to strive after a higher education.

At the conclusion of Mr. Beaumont's remarks an hour or two was spent in enjoying the good things of an elaborate menu, at the conclusion of which the president arose and stated that the thanks of the club were due to the Builders and Traders' Exchange for substantial aid and encouragement. He then proposed the toast, "The Builders and Traders' Exchange," which was responded to by Mr. James John, secretary of the exchange, in a very pleasing manner. Remarks were also made by Mr. George H. Fox, Alexander G. Murray and Matthew Benner. The other toasts and responses were respectively as follows:

"The Relation of the Architect to the Draughtsman," by Mr. W. L. B. Jenney.

"The Architectural Draughtsman," by Mr. Paul Lautrup.

"The Architectural Journals of Chicago," by Mr. John K. Allen.

"The Adjudicating Committee," by Mr. W. L. B. Jenney.

Short speeches were also made by W. G. Williamson, W. B. Mundie, F. L. Linden and others.

The programme was varied with music and recitations. There was a great deal of musical talent present, both vocal and instrumental. President Beaumont sang "The Wolf" and a German drinking song. Mr. Jobson, Mr. R. B. Williamson, John K. Allen, W. L. Klewer, and others sang selections, and encores were frequent.

Mr. D. G. Phimister gave a very artistic rendition of "Spartacus to the Gladiators," "The Charge of the Light Brigade," and "The Madman and the Razor." Mr. Gibb's "How Biddy Maloney Rode the Bicycle," and "How Sockery Set a Hen," were enjoyed very much by all. There were several very good violin solos.

The annual exhibition of drawings by the members of the sketch club remained upon the walls in the Builders and Traders' Exchange rooms for several weeks.

Ranged along the four walls of the room, crowded together and in some places overlapping each other, are the 166 club drawings composed of miscellaneous sketches in pen and ink, sketches from nature in water colors and miscellaneous drawings, contributed by the following members: F. L. Linden, A. W. Hompe, George A. Schoenberg, O. C. Christian, F. L. Lively, C. B. Schaefer, Geo. W. Maher, A. R. Niemi, R. A. Denell, W. B. Mundie, C. A. Kessell, O. C. Smith, H. F. Hazleton, T. O.

Fraenkel, W. G. Williamson, Myron H. Church, L. H. Heim, W. R. Ray, F. R. Hirsche, C. F. Jobson, A. C. Berry, Ashton Pentecost, J. H. Carpenter, George Beaumont, R. E. Schmidt, J. A. Miller and Paul Muller.

There was a somewhat larger number of drawings presented at the exhibition last year, but there is a notable improvement in the quality. Last year purely architectural drawings were in the majority, while this year the more purely artistic prevails and even the architectural sketches are given a better and more artistic treatment. Some of the credit of this is undoubtedly due to the sketching expeditions inaugurated by the club the past year, and which resulted in much pleasure as well as profit to the participants.

The exhibit committee, into whose hands the selection and hanging of the drawings were given, has exercised its prerogatives wisely and judiciously, and has placed upon exhibition a collection of which the club can well be proud. The exhibit has been visited by a large number of citizens, and received universal praise.

The National Association of Builders.

THE following circulars of preliminary information, from the National Association of Builders, have been sent to all affiliated associations :

At the second annual convention of the National Association of Builders (to be held at Cincinnati, Ohio, on the first Tuesday of February next, regular notice of which will be given later), several most important matters will be presented for consideration, and the Executive Board deem it wise to call the attention of all filial bodies to these subjects thus early in order that opportunity may be given for deliberation and the instruction of delegates.

1. The first and perhaps most important subject will be the report of the Committee on Uniform Contracts. This committee was appointed by the president in August last, to confer with committees from the Western Association of Architects and the American Institute of Architects, and their conference has been fruitful of results of great interest to all builders.

Their report will demand most careful consideration, and filial bodies should select their delegates and instruct them with special reference to the discussion of this matter, which has so long needed the united action of builders and architects throughout the country, and which now seems approaching definite results.

2. The second subject in importance will be a new method of dealing with the labor question through "permanent arbitration," a plan for which will be submitted by the committee having it in charge. The consideration of this proposition may well enlist the best wisdom of the various associations of builders all over the country, and it is to be hoped that the wisest and ablest men will be sent to the convention in view of the discussion of this vital question.

3. The third subject will be the establishment of "rules for the protection of builders in estimating work." This question has long needed definite and uniform treatment and united action; but, with the exception of a few localities, there has been little or no system observed, and many evils have obtained a foothold. The time seems propitious and the means adequate, through the deliberations of the central body, to arrange a code of rules and secure their adoption by all filial bodies; this result cannot but be a great benefit to all builders, and the Executive Board reiterates its desire that all associations represented by delegates to the convention take particular pains to thoroughly consider this and the other subjects above particularly referred to, and instruct their representatives in accordance therewith.

Many other subjects will be brought before the convention, and interesting papers will be read by parties who are peculiarly fitted to prepare them, to which reference will be made in the later circular above referred to; but these three important questions it has been deemed wise to announce in advance, that members may be assured that the coming convention is to be one of great interest and importance.

Issued by order of the Executive Board. WM. H. SAYWARD, Secretary N. A. of B.

THE NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.

OFFICE OF THE SECRETARY,
No. 164 DEVONSHIRE STREET, BOSTON, NOV. 1, 1887.

To.....

GENTLEMEN,—The National Association of Builders of the United States of America was organized in March last at a convention held for that purpose at Chicago, Illinois, by representatives of Builders' Exchanges and Associations from (27) twenty-seven of the principal cities of the country, viz:

Albany, N. Y.	Detroit, Mich.	Pittsburgh, Pa.
Baltimore, Md.	Grand Rapids, Mich.	Providence, R. I.
Boston, Mass.	Indianapolis, Ind.	Rochester, N. Y.
Buffalo, N. Y.	Milwaukee, Wis.	St. Louis, Mo.
Charleston, S. C.	Minneapolis, Minn.	St. Paul, Minn.
Chicago, Ill.	Nashville, Tenn.	Sioux City, Iowa.
Cincinnati Ohio.	New Orleans, La.	Troy, N. Y.
Cleveland, Ohio.	New York, N. Y.	Washington, D. C.
Columbus, Ohio.	Philadelphia, Pa.	Worcester, Mass.

The purposes of the Association, as set forth in the Constitution adopted, are: "To foster and protect the interests of contractors, manual workmen, and all others concerned in the erection and construction of buildings; to promote mechanical and industrial interests; to acquire, preserve, and disseminate valuable information connected with building trades; to devise and suggest plans for the preservation of mechanical skill through a more complete and practical apprenticeship system; and to establish uniformity and harmony of action among builders throughout the country. The better to accomplish these objects, this Association shall encourage the establishment of Builders' Exchanges in every city or town of importance throughout the country, and shall aid them to organize upon some general system that will not conflict with local customs and interests, in order that through these filial associations the resolutions and recommendations of this National Association may be promulgated and adopted in all localities."

It is desirable, in carrying out these important objects, to have the coöperation of all the cities of importance in the country—at all events those east of the Rocky Mountains; and the National Association earnestly desires the immediate affiliation of Exchanges or Associations in cities not already represented.

This affiliation ought to take place at once, so that representatives may besent to the "Second Annual Convention," which is to take place at Cincinnati, Ohio, on the first Tuesday of February next, and at which many matters vitally interesting to all builders will be discussed and acted upon.

Affiliation may be secured through Builders' Exchanges (representing all the trades collectively)—one from each city—but in cases where such Exchanges do not exist, the leading Association of such city representing a special trade may secure affiliation till a general Exchange is established, when the Exchange will be entitled to the representation. Your city should certainly be represented at this central council, and the Executive Board urgently request that you take steps to obtain the representation. Your interests are identical with those of your sister cities, and neither you nor they can afford to lose the advantage of mutual counsel.

If there is a Builders' Exchange in your city that represents the various trades concerned in the construction, erection, and completion of buildings, have that body take action, if possible, to send representatives to the next convention (corresponding with the National Secretary as to the proper method of so doing). If there is not an Exchange, then let the representation come through the leading special trade organization, but do not let your city be unrepresented.

At this convention the details of a Uniform Contract will be discussed, and a plan adopted; also a method of settling "labor troubles" through "Permanent Arbitration"; also the adoption of a "Code of Rules" to protect Builders in estimating work. These, together with many other questions of interest which will be brought up for discussion, should be sufficient to show the importance of the work of the National Association and

the desirability of your coöperation, not only at the coming convention but in all future action.

We send you by this mail a copy of the official report of the proceedings at our first convention.

Trusting that your interest will be awakened by what we have said, and that the builders of your city will realize the importance of our work, we await your reply.

Issued by order of the Executive Board.

WM. H. SAYWARD,
Secretary N. A. of B.

The following circular and blank form has been circulated by the National Association of Builders' Committee on Statistics and should be immediately filled out and returned:

THE NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.

OFFICE OF THE SECRETARY,
No. 164 DEVONSHIRE STREET, BOSTON, NOV. 1, 1887.

To.....

To facilitate the work of the Committee on Statistics in preparing their report for the next Annual Convention, will you kindly fill out the enclosed blank and return the same in the enclosed envelope.

We desire to obtain as accurate information as possible from each important city of the country, in relation to the hours of labor required in the limits of a day, in the various branches of the building trades; also the wages (per hour) paid in the spring, as well as wages paid during the busy season. We also desire information as to strikes or lockouts that may have occurred during the year.

Per order of the Executive Board.

WM. H. SAYWARD,
Secretary N. A. of B.

Committee on Statistics: George C. Prussing, Chicago, Ill.; Thomas Mason, Milwaukee, Wis.; E. F. Osborne, St. Paul, Minn.

HOURS OF LABOR AND RATE OF WAGES DURING 1887, IN THE BUILDING TRADES, IN THE CITY OF.....

TRADES.	Number of Hours Labor required in limits of a day.	Pay per Hour, Spring.	Pay per Hour, Summer.	Strikes, Lockouts, or other Disturbances.
Bricklayers.....
" Tenders.....
Stonemasons.....
" Tenders.....
Carpenters.....
Blacksmiths.....
" Helpers.....
Whitesmiths.....
" Helpers.....
Granite Cutters.....
Freestone Cutters.....
Plasterers.....
" Tenders.....
Slate Roofers.....
" Helpers.....
Composition Roofers.....
" Helpers.....
Copper and Tin Roofers.....
" Helpers.....
Copper Workers.....
" Helpers.....
Plumbers.....
" Helpers.....
Painters.....

For the COMMITTEE ON STATISTICS of the NATIONAL ASSOCIATION OF BUILDERS.

From.....
(Exchange or Association.)

New Publications.

A SHORT HISTORY OF ARCHITECTURE. By A. L. Tuckerman. New York: Charles Scribner's Sons.

In this little volume of 175 pages, Mr. Tuckerman has attempted the impossible, and has almost achieved success. He has succeeded in conveying, in concise form, the history of the great, distinctive styles, in their origins and growth, and in their relations and indebtedness one to another. Compelled to be brief, he has stated conclusions which will oftentimes fail to impress the general reader by reason of the lack of sufficient background of fact and detail. Many times, he turns aside from narrative to criticism and not a few times does the criticism take the form of preaching. We comment on this because the overburdened general reader, once induced to go at such a work, straightway, for the most part, forgets the criticisms and the moral, or reduces them to universal dogmas, to apply in all manner of unmeant cases, whereas more detail would have served to fasten the moral on the memory and suggest the manner of its future application. And yet, if Mr. Tuckerman felt himself restricted to the making of so small a volume, we have not the heart to quarrel with him over the use to which he has put his pages; for his criticism is excellently well done; he has caught the feeling of the subject in hand; and his preaching is wholesome in the extreme. We can commend these brief chapters as well to the architect as to the lay brother and feel sure that, once apprehended, his reading of history will help him to a purer treatment of his styles, and perhaps even induce him to give up some pet peccadilloes dear to his heart; mayhap the "columns and pilasters which support nothing," or the "decoration which serves only to conceal ill-adjusted architectural lines," or mayhap the "buttresses built up to receive no strain," or "the placing of pinnacles upon the corners of towers and elsewhere where they serve no end." We see several very lively morals in the last paragraphs devoted to Egyptian monuments; for instance, on the hampering of art by conventionality and dogmatic laws. Here will be found food for thought for those of our friends who scorn everything but mass; while the architect who sees all things through a microscope, and hence knows only detail, may gather a hint from the remarks on Indian rock temples. With the very high estimate which is placed on the perfection of Greek work we are not disposed to find fault, while we hope for the time when modern

work will be able to take its place by the side of the Greek in harmony of proportion and in chastity and control of detail. We have always a welcome for any book which shall serve to educate the public taste, and guide the fickle followers of fashion to an appreciation of something deeper in architecture than a succession of modes, set by a succession of architectural modistes, who agree to furnish the correct and latest thing. Mr. Tuckerman very truly says that emotion, which has no place in mechanics, has a great influence in art, and that architecture consequently knows no fixed laws which govern the height of a spire or the projection of a molding. But, in spite of the much to be blamed *non est disputandum*, there is good taste and bad taste, with a broad gulf between; there remains a unity, which strikes out in many directions, and which dictates a harmony of the whole with the environment in place, climate, customs, sentiment, and a harmony of the parts with the whole, and hence with one another. No law conned by rote will supply this taste or sentiment; but a slight knowledge of the history of architectural styles may serve to create in the mind of the reader a feeling of the need of this unity, and thus start the process of education. We hope to have from Mr. Tuckerman, at some future day, an essay on a topic noted in his preface, namely; the relations of styles to the life of the people, sociologically considered. The value of the book would be somewhat enhanced for the general reader by the addition of outline perspective plates, illustrative of the several styles; for it is difficult for one unacquainted with the forms to which reference is made to picture to the mind the thing when only a plan and text are given; for example, the explanation of the causes which made the pointed arch a common feature in the style which came to be called Gothic.

Our Illustrations.

Residence for W. A. Giles, Chicago; W. W. Clay, architect.

Residence for E. M. Cooper, Memphis, Tenn.; Cobb & Frost, architects, Chicago.

Richmond Memorial Library, Batavia, N. Y.; James G. Cutler, architect, Rochester, N. Y.

Business block for Wirt Dexter, 381-387 Wabash avenue, Chicago; Adler & Sullivan, architects.

Workhouse, police court, jail and jailer's residence, Newport, Ky.; Chas. Crapsey and W. R. Brown, architects, Cincinnati, Ohio.

Pump house for the Omaha Waterworks, Omaha, Neb.; Geo. L. Fisher, architect. The pump house is two stories high, will be finished with tile floor, glazed brick walls with terra-cotta trimmings, and a very richly paneled oak ceiling; all the work in the vestibule, entrances, etc., to correspond. The building will be built of solid stone. The stone to be used is a light Missouri sandstone; red slate roof, copper crestings, finials, etc. The foundation, including the water table, will be completed this fall.

INITIAL SKETCHES.

Bits from First National Bank building, Cincinnati, Ohio; James W. McLaughlin, architect.

New south gable, Case School of applied Science, Cleveland, Ohio, and newel post; Clarence Arey, architect.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Residence of Geo. W. Hale, Chicago; J. L. Silsbee, architect.

Residence for F. G. Kammerer, Kenwood, Ill.; W. W. Clay, architect, Chicago.

Three houses for A. S. Abell, Baltimore, Md.; Chas. E. Cassell, architect.

Residence of Architect F. L. Foltz, corner Astor and Goethe streets, Chicago; Treat & Foltz, architects.

Double flat residence for H. H. Blake, Chicago; W. W. Boyington, architect. The lot covered is 30 by 80, with courts to admit light. Entrance to left is to first flat. There are seven rooms in the first story, with the kitchen in the basement. Second and third stories contain thirteen rooms, and are together in a manner similar to a two-story house with entrance to the right. The second story is fifteen feet shorter than the first, and the third fourteen feet shorter than the second. Cellar, furnaces, and everything for both flats separate, so that while about work in the yard or elsewhere tenants do not meet. Front is built of red brick with terra-cotta and brownstone trimmings. Interior is finished in natural woods, oak, cherry and pine, with hardwood mantels and frescoing; cost \$16,000.

[In correction of titles of photogravure plates in May and July numbers of designs by architects J. A. and W. T. Wilson, attention is called to the following correct titles: In May: Residence of B. F. Newcomer, St. Paul street, Baltimore, Md.; J. A. & W. T. Wilson, architects. In July: Residence of Edwin Reese, North Charles street, Baltimore, Md.; J. A. & W. T. Wilson, architects.]

Correspondence.

Editors *Inland Architect*: ERIE, Pa, November 28, 1887.

GENTLEMEN,—Please inform me through the columns of your valuable paper where the Illinois Architectural Institute is located.

Respectfully, A SUBSCRIBER.

[The educational institution referred to is probably the Illinois University, at Champaign, Ill., which has the most advanced and comprehensive architectural school in the West as one of its departments, under the direction of Professor N. Clifford Ricker. For particulars address that gentleman at Urbana, Ill.—EDITORS INLAND ARCHITECT.]

Mosaics.

"ENGLISH (brick red) Duresco" is held in high favor in many sections of the country, particularly in the South, where it has been extensively used. It gives the permanent appearance that pressed bricks are valued for. Those who wish to learn further of this composition can address Mr. Howard Fleming, No. 93 Liberty street, New York City, who represents the manufacturers in this country.

It is desired to print in *The Century* a compact record of the various formal meetings which have taken place between the veterans of the Union and Confederate armies; and in order to make the list more complete, the editor will receive with thanks information of the less widely-known occasions of the kind, including place, date, and names of war organizations participating; and accompanied, so far as possible, by printed reports of the proceedings. Address, "Reunion," *The Century Magazine*, 33 East Seventeenth street, New York City.

A POPULAR THOROUGHFARE.—The Wisconsin Central Line, although a comparatively new factor in the railroad systems of the Northwest, has acquired an enviable popularity. Through careful attention to details, its service is as near perfection as might be looked for. The train attendants seem to regard their trusts as individual property, and as a result the public is served *par-excellence*. The road now runs solid through fast trains between Chicago, Milwaukee, St. Paul and Minneapolis, with Pullman's best and unequaled dining cars; it also runs through solid sleepers between Chicago, Ashland, Duluth and the famous mining regions of Northern Wisconsin and Michigan.

JAMES B. SCOTT & Co., of Pittsburgh, forwarded for inspection a unique testimonial with reference to the quality and character of their Duquesne guaranteed roofing plates. The testimonial is in the form of a piece of tin cut from a roof which had been in use some two years. The roof in question is on a building in New Comerstown. The roof was never painted, and accordingly the metal has had no protection except simply that afforded by the coating originally supplied. The piece of metal is in excellent condition, without any appearance of rust, although it is somewhat discolored by the weather, and probably also by coal soot, as it is blackish. The thickness of the coating is easily verified by cutting into the surface with a penknife. Referring to this specimen, our correspondents say that they have had many testimonials of a high character, and add, "but we confess that nothing so emphatic as the present one has been received. It outlines, we believe, an experience unprecedented with any plate that is not hand dipped."

THE A. W. Faber lead pencil has been so long before the public that it has become a household property. It is fair to presume there is not a man, woman or child in the nation who has not used this celebrated make of pencils, and now we are to have a new departure from the old style name to a new one by the introduction into the United States of the (in Europe) still more celebrated "Johann Faber Lead Pencil." Mr. Johann Faber, who was for a long time associated with his brothers, A. W. and Lothar Faber, in manufacturing the A. W. Faber pencil, some nine years ago, established an extensive works at Nuremberg, Germany, with greater facilities and improved machinery for the express purpose of manufacturing lead-pencils of a superior high grade. So successful has he been in the venture that his pencils are now used and commended by Messonier, Mokart, Van Piloty, Gabriel Max and the leading artists of the world, and also by the various art schools of Europe. Until recently Mr. Faber refrained from putting his pencils on the American market, but has now made Messrs. J. W. Queen & Co., of Philadelphia, his general agents for the United States, and ere long this famous pencil will become as popular, no doubt, in this country as it is in Europe.

IN the arena of architectural construction it is impossible not to recognize the efforts of thoughtful men to produce material that enter into the composition of buildings that in a near degree shall correspond to the progressive ideas prevalent among the designers of modern edifices. From time to time these practical devices, as they have become successes, have been referred to in these columns, as matters of interest to the building profession. During the recent convention of the Western Association of Architects at Cincinnati, the manufacturers of what is called Byrkit's patent combined sheathing and lath, took occasion to bring that new device in material to the attention of the profession by sending samples for examination. The purpose of this new material is to furnish a substitute for the ordinary lath and sheathing, which will not only serve the purpose better, but shall afford many other advantages, and at the same time not add materially to the cost of construction, if at all. Without going into minutiae it is sufficient to say this new substitute is composed of strips, with dovetail projections that are matched together by tongues and grooves. The claims for this new material are: the plastering cannot crack; the kerfs in the wall prevent warping; the walls are made solid and smooth; cold and dampness are kept out of the walls; the clinches of mortar cannot be broken from it; saves half the mortar; saves studding and joists; sliding doors can be put in without extra casing; gives carpenters a good foundation for putting up finish; nails can be driven anywhere in the walls without injury to the plastering, etc., etc. In the case of brick structures, side walls are made perfectly dry by its use; hollow walls inexpensively made; floors, partitions and walls are deafened—saves laying double floors; in ceilings it adds strength by acting as bridging, and helps to tie the walls together. To these and many other advantages claimed, many reputable architects who have had experience in its use give their unqualified approbation. It would seem, this new material, which has been in use only three years, has come to stay, as there are now over a hundred lumber firms manufacturing it, which indicates there must be a large and growing demand for it. Those who would learn more of the Byrkit combined sheathing and lath can correspond with Mr. A. A. Adair, secretary of the Byrkit Sheathing and Lath Co., Indianapolis, Indiana, who can give them a list of the important buildings in the country which their goods have been made a part of the specifications of the architects and such other information as may be desired.

Synopsis of Building News.

Chicago, Ill.—Architects Handy & Cady report: For Spinney & Crossman, two three-story residences, 42 by 70 feet; cost \$12,000. For J. A. Weaver, four-story stores and flats, 40 by 70 feet; cost \$15,000.

Architect Adam F. Boos: For G. Roth, three-story stores and flats, 23 by 75 feet; cost \$6,500.

Architect Geo. Beaumont: For North-Western Brewing Co., brewery, 175 by 186 feet; cost \$125,000.

Architects Furst & Rudolph: For P. Becker & Co., three-story factory building, 50 by 122 feet; cost \$20,000. For C. J. Furst, three-story dwelling, 26 by 57 feet; cost \$8,000.

Architect S. M. Randolph: For J. M. Hamilton, two-story residence; cost \$10,000.

Architect W. H. Drake: For H. F. Waite, four-story stores and flats; cost \$18,000.

Architect R. Rae, Jr.: For M. Parish, two frame dwellings; cost \$8,000. For John A. Woods, residence; cost \$5,000. For James Willett, flats; cost \$8,000.

Architect C. A. Weary: For H. K. Wheeler, three-story flats; cost \$5,500. For H. W. Martin, eight flat buildings, 175 by 89 feet; cost \$65,000. For S. Foley, three-story flats, 50 by 63 feet; cost \$16,000.

Architects Addison & Feidler are preparing plans for the Novelty Theatre building to be erected on the corner of Milwaukee avenue and Peoria street, at a cost of \$200,000.

Cincinnati, Ohio.—Reported by Mr. Lawrence Mendenhall:

The main events in architectural circles this month were the annual convention of the Western Association of Architects, and the opening of the new building known as the School of Design. Both were well calculated to create a stir, for, viewed from the side of art, they were grand successes. The sketches, plans, perspectives, and water colors made the finest collection of architectural subjects ever seen in our city, if not in the country, the product of the genius of western wrens. As for the school of design, it forms a worthy companion piece to the art museum, and together they will stand as a monument to the architect, James W. McLaughlin. Cincinnati can well be proud of her architects, and she cannot honor them too much, remembering to give "honor to whom it is due."

Architect Theodore Richter, Jr., Johnston building, reports: Addition of four rooms and hall to schoolhouse at Norwood; contract let; to cost \$7,500. Frame dwelling for A. B. Duncan, Nicholasville, Ky.; to cost \$4,000. Frame cottage at East Norwood for W. W. Riley; to cost \$2,800. Frame dwelling in same suburb for J. W. Burkhardt; to cost \$3,200. Frame dwelling for F. Sielke, Price Hill; to cost \$3,500. Addition to dwelling at 37 Dunlap street, for Mrs. Gephardt; to cost \$1,800. Brick dwelling for W. B. Morricks, on Price Hill; to cost \$3,500.

Architect George W. Rapp, southwest corner of Fifth and Walnut streets, reports: Six-story stone building for W. W. Scarborough, to be erected on Race, near Seventh street; to cost \$20,000. Also a brew house, 153 by 189 feet, on Plum street, for the Windich-Muhlhauser Brewing Co., adjoining their old building; to cost \$300,000. This building will be four and five stories above ground, with cellar 40 feet deep. It will be for brewing beer, pitch house, repair shops, boiler house, etc. Mr. Rapp is preparing plans for a series of buildings for the Addystone Pipe and Steel Co., near Cincinnati. One building, 126 by 400 feet, for foundry purposes, built of Greensburg stone, is already in process of construction, and will cost \$100,000. Other buildings will soon follow.

Architect Jas. Trowbridge (Jimmy), as he is called, is lying very low with the typhoid fever. The craft cannot afford to lose him, for he is a brilliant young architect.

Architect J. W. McLaughlin, Johnston building, has working plans for a part of the Centennial Exposition buildings, to extend 1,250 feet on the canal, and is one of the invited architects to prepare designs for the soldiers' and sailors' monument, to be erected at Indianapolis, Ind. The legislature of Indiana has appropriated \$200,000 for this or a memorial building, and the Grand Army of the Republic will give \$25,000 additional. Ten architects from the principal cities have been invited to submit plans, and will be paid for their designs.

Architect Gustave W. Drach, Lincoln's Inn Court building, reports: Double brick dwelling for W. H. Wellman, to be located on Woodburn avenue; to cost \$10,000; contract let. Three-story brick bakery and dwelling for Henry Jacob, to be located on Twelfth, between Race and Vine streets; to cost \$3,000; contract let. Two and a-half

story pressed brick dwelling, to be located 295 West Eighth street, for E. McGoldrick; to cost \$5,000. Making plans for six-story store for Lowry & Goebel, to be erected on Elm street; to cost \$18,000; work not let. Just let contract for a big Catholic church, New Baltimore Pike, Fairmount; to cost \$10,000.

Architect Louis Pickett, No. 308 Main street, is making plans for a frame church, to be erected at the corner of Hill street and New Baltimore Pike, Fairmount; to cost \$4,500. He has other work in hand, and is superintending the erection of Hanke Bros. large store on Main street, opposite Twelfth street.

Architects Crapsey & Brown, Wiggins' Block, report: Pressed brick church, with freestone trimmings, for Washington Court House; to cost \$25,000. Remodeling dwelling for Dr. Falkner, Hamilton, Ohio; to cost \$7,500. Double brick dwelling for Allen Andrews, Hamilton, Ohio; cost \$7,000; contract let. Frame dwelling for Wm. Reidenbaugh, Hamilton, Ohio; cost \$2,300; contract let. Remodeling brick dwelling for C. E. McBeth; cost \$2,500. Making plans for chapel for Jewish cemetery, Lick Run; to cost \$3,000. Making plans for jail and workhouse for Newport, Ky.; to cost \$40,000.

Architect A. O. Elzner, Lincoln's Inn Court building, reports: Cold storage house for M. Hoffer, Jr., to be located on Bank street, and making plans for a \$7,000 dwelling for a \$7,000 dwelling for George Pohlman, to be erected on Ingleside Place.

Architect Emil G. Rueckert reports: Extensive stables for Ursuline Convent at St. Martin's, Brown County, Ohio; the building will be of brick, two stories high, with all the modern improvements. The widest wings will be 200 by 55 feet; cost \$35,000. Jos. Niehaus will build a two-and-a-half-story residence of brick and stone, of 9 rooms and slate roof; cost \$8,000. For the same party, two two-and-a-half-story brick houses, of nine rooms each, slate roof; cost \$5,500 each.

Architects Forbush & Green, T. Fitzhugh, manager, report the following: For Dr. J. E. Baker, Wyoming, O., a frame residence of seven rooms, pine finish, and slate roof; cost, \$4,500. For A. H. Caffer, a frame house of eight rooms, shingled, second story, with slate roof; cost, \$5,000.

Cleveland, Ohio.—Architects Burnham & Root, of Chicago, report: Bank and office building for the Society for Savings, ten stories high, ground plan 103 by 132 feet. The building is designed to be built entirely of cut stone. The cost is not reported by the architects, but will probably aggregate \$700,000.

Colorado Springs, Colo.—Architect Frank T. Lent reports: Outlook very promising. For M. A. Maus, two-story and attic frame dwelling, 38 by 59 feet; cost \$10,000; projected. For Wm. Calvert, one-story frame hotel, 30 by 50 feet; cost \$2,500; Benj. Hock, builder. For Mrs. J. Cahn, two-story frame dwelling, 30 by 42 feet; cost \$2,500. For James H. Barlow, two-story frame dwelling, 35 by 43 feet; cost \$3,500; Jos. Dozier, builder. For J. H. Bacon, two-story dwelling, 36 by 52 feet; cost \$7,000; Jos. Dozier, builder. For school board, two-story brick schoolhouse, 80 by 84 feet; cost \$20,000; Johnston & Chenoweth, builders. For Chas. W. Durand, three-story stone front business block and opera house, 50 by 110 feet; cost \$30,000. For Sweet & Jackson, three-story story brick and stone store building, 60 by 80 feet; cost \$12,000.

Detroit, Mich.—Architects Scott & Co., report: For Henry Russell, two-story brick and stone dwelling, 48 by 68 feet, slate roof; cost \$15,000; I. E. Boomer, builder.

Architect Peter Dederichs, Jr., reports: For T. A. McGraw, two-story brick and stone office block, 78 by 40 feet; cost \$10,000; Alex. Chapalon, Jr., builder. For A. Garfield, two-story double store, 40 by 100 feet; cost \$7,000; Aug. Dorsch, builder. G. J. Vinton is building a two-story brick and stone dwelling, 32 by 70 feet; cost \$6,500.

The Board of Education is erecting a two-story brick and stone school building, 64 by 73 feet, slate roof; cost \$23,000; David Wallace, superintendent; De Lane, builder.

Architect J. V. Gearing: For Detroit Athletic Association, two-story brick and stone club house, 125 by 65 feet; cost \$12,000; A. G. Hollands, builder. For A. Shelly, two-story brick and stone dwelling, 38 by 60 feet, slate roof; cost \$7,600; Candler Bros., builders.

Architects Donaldson & Meier: For Dr. H. C. Wyman, three-story office building, 50 by 40 feet, brick and stone; cost \$5,500; James Dean & Bro., builders.

Architects Van Leyen & Preston: For Oscar M. Springer and others, four-story apartment building, brick, Ohio stone trimmings, in wide courses and bald rock faced, flat tin roof with steep mansard roof fronts, with gables in same all red-slatted, size 80 by

(Continued on page XVI.)

TO ARCHITECTS.



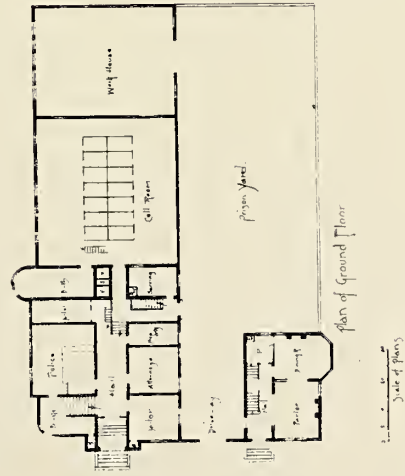
GENTLEMEN:

We assume that every progressive Architect is as desirous of having good, lasting material put into the buildings he designs, as he is of having his designs conform to the best architectural and sanitary rules, but it may be doubtful if he makes as close a study of materials as of principles. In the matter of paint, for instance, how many Architects look beyond the assumed merits of white lead and oil into the superior qualities of the Sherwin-Williams Paint, which is without an equal for excellence as to durability, beauty and economy? Why write "lead and oil" in specifications year after year without inquiring into the superior merits of a paint made by improved and specially adapted machinery, of the very best materials in proper proportions, and under the supervision of experts in color and chemical science? The Sherwin-Williams Paint is fully guaranteed, and may be relied upon as in all respects better adapted to structural decoration than any other paint.

Careful investigation on the part of intelligent Architects is desired.

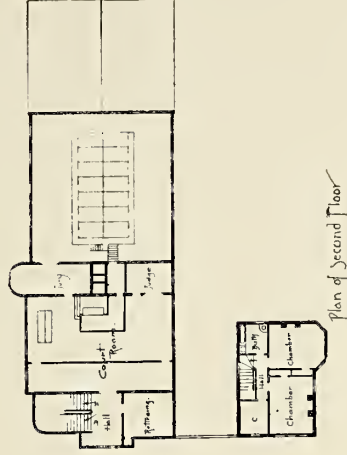
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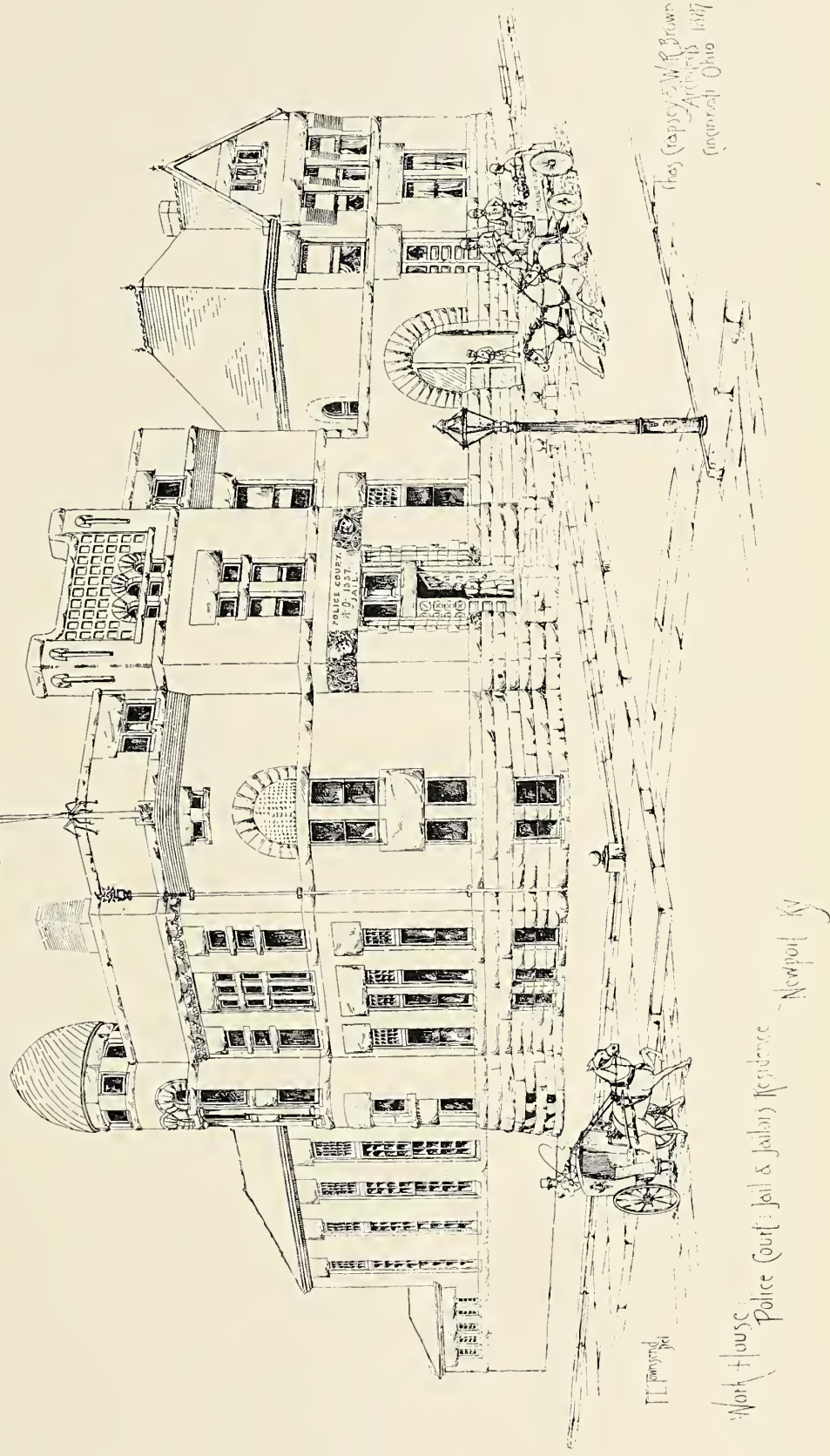


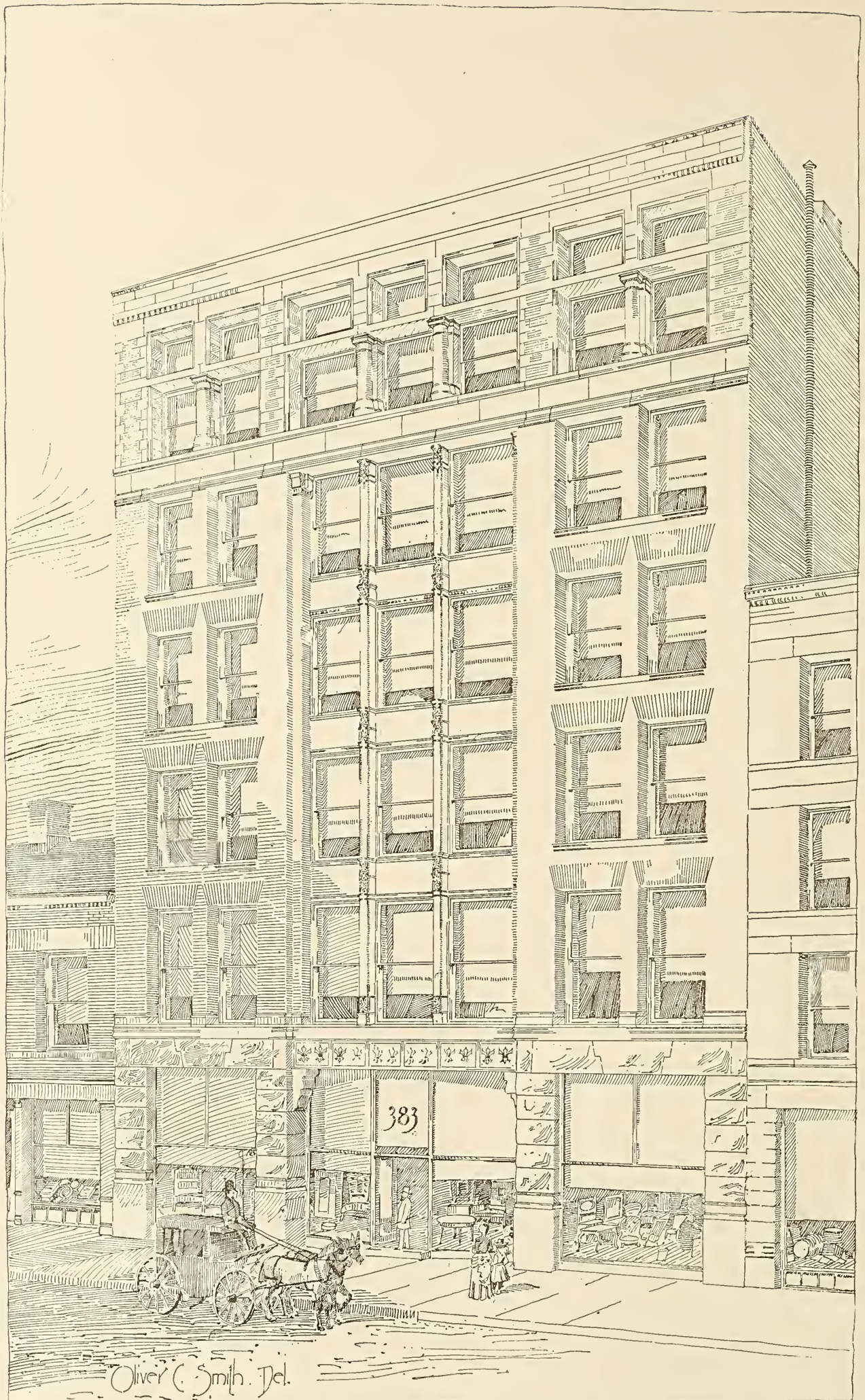
Plan of Ground Floor

Scale of Feet



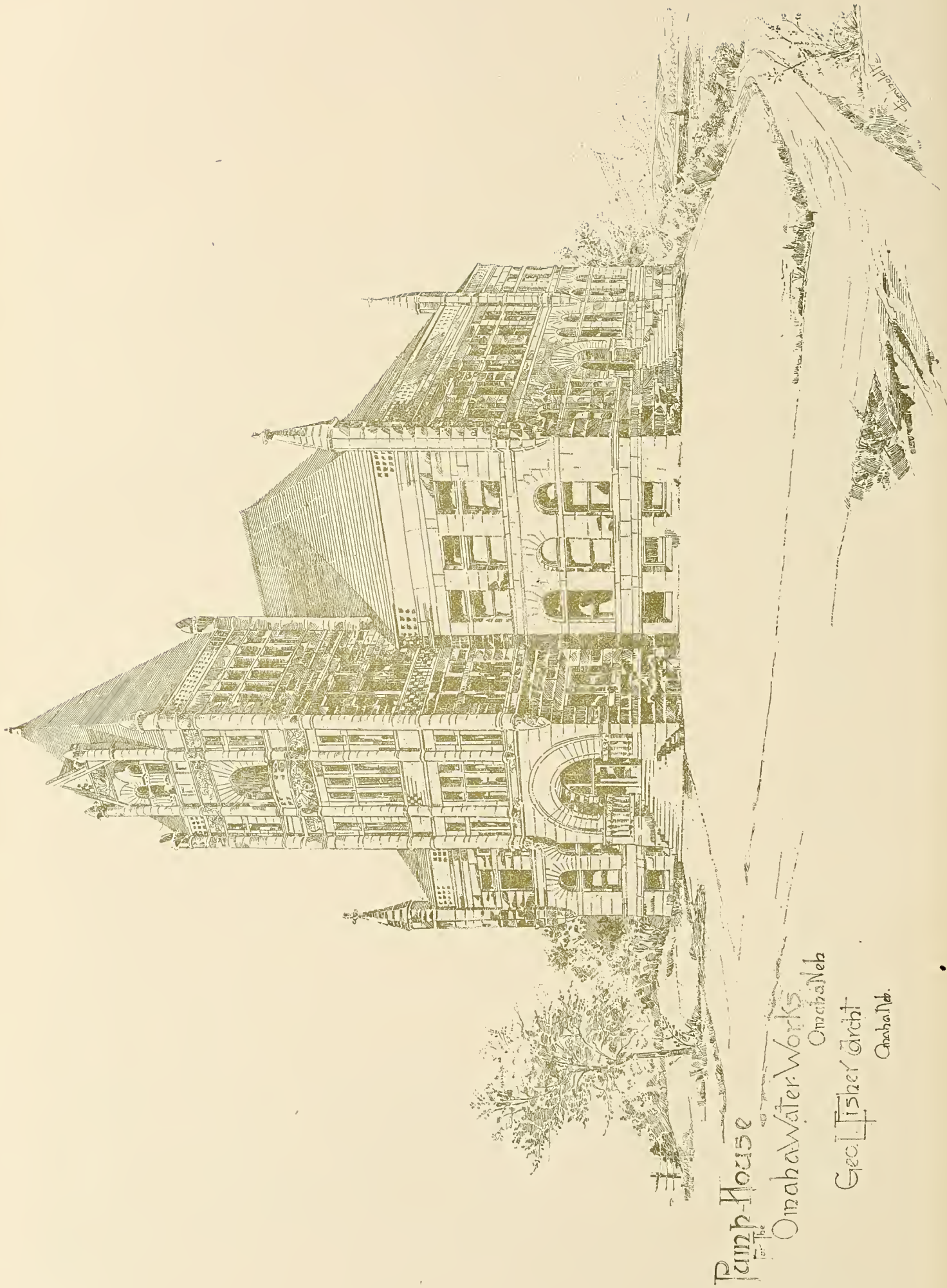
Plan of Second Floor





BUSINESS BLOCK FOR WIRT DEXTER, CHICAGO.

ADLER & SULLIVAN, ARCHITECTS.



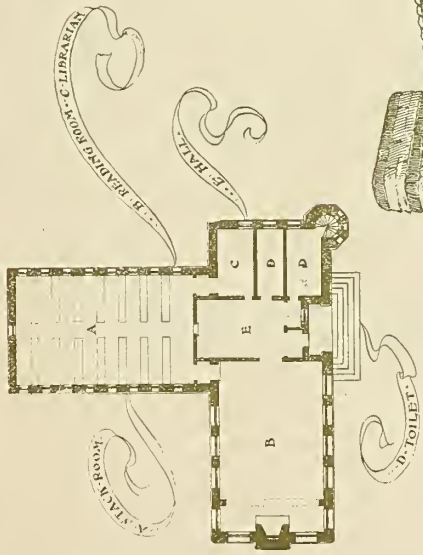
Pump House

for the Omaha Water Works

Omaha, Neb.

Geo. Fisher Archt.

Omaha, Neb.



A. READING ROOM

C. LIBRARY

E. HALL

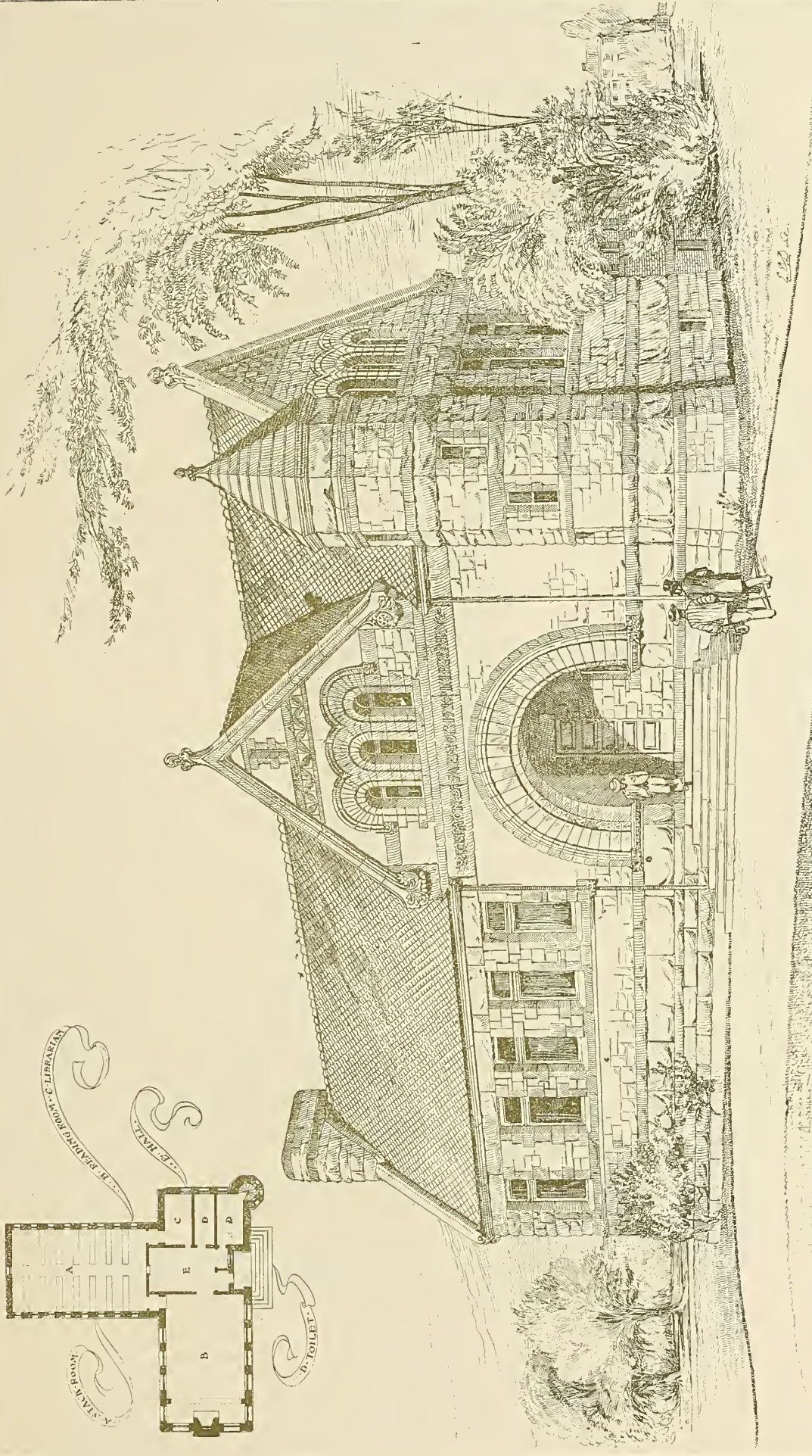
B. TOILET

D. TOILET

F. HALL

RICHMOND MEMORIAL LIBRARY
BATAVIA, N.Y.

JAMES G. CUTLER, ARCHT.
... ROCHESTER, N.Y.





RESIDENCE FOR W. A. GILES, CHICAGO.

W. W. CLAY, ARCHITECT.



Entered at the Postoffice at Chicago as second-class matter.

A MONTHLY JOURNAL (WITH AN INTERMEDIATE NEWS NUMBER AND A PHOTO-GRAVURE EDITION) DEVOTED TO WESTERN INTERESTS.

VOL. X.

CHICAGO, DECEMBER, 1887.

No. 8

INTERMEDIATE NEWS NUMBER,

DEVOTED TO

ASSOCIATION AND BUILDING NEWS.

PUBLISHED BY

THE INLAND PUBLISHING COMPANY,

CHICAGO, ILL.

Association Notes.

MICHIGAN STATE ASSOCIATION OF ARCHITECTS.

THE architects of the state of Michigan recently formed a state association. Much preliminary work was necessitated, as it was the desire that the association should be formally accepted by the Western Association before it was declared permanent. As this was done, the secretary now makes public the proceedings leading to formation.

An informal preliminary meeting was held at one of the offices on the afternoon of October 21, 1887, by eight practicing architects of the city, to consider the advisability of forming a local organization of architects. Mr. Mortimer L. Smith was called to the chair. After a general discussion, it was moved and passed that the gentlemen present forthwith form an association of architects. A committee of three was appointed, to ascertain what steps would be necessary in perfecting an organization and joining the Western Association of Architects, committee to report at next meeting.

Said second meeting was held on the evening of October 26, at the room of the Citizens' Association, Moffat building, at which there were present: Messrs. E. W. Arnold, Arthur B. Cram, John M. Donaldson, Joe V. Gearing, Walter MacFarland, George D. Mason, Henry J. Meier, Richard E. Roseman, Zack Rice, Jas. S. Rogers, Jr., Mortimer L. Smith, and John Scott.

On motion, the following gentlemen were invited to become members: Messrs. Julius Hess, Gordon W. Lloyd, Frederick L. Smith, and Arthur H. Scott.

The committee appointed at last meeting reported that they had corresponded with Mr. Alexander, secretary of the Western Association of Architects, who had advised organizing as a state association, with constitution and by-laws, and then apply for admission to the Western Association. Committee further reported that they had, therefore, prepared a constitution and by-laws, which was therewith submitted. The constitution and by-laws was then read, amended and adopted as a whole.

On motion, the association then proceeded to an election of officers, with the following result: President, John M. Donaldson; senior vice-president, Mortimer L. Smith; junior vice-president, George D. Mason; secretary, Jas. S. Rogers, Jr.; treasurer, Richard E. Roseman; board of directors, the officers and Arthur B. Cram and John Scott.

After the election it was moved and passed that all members apply for admission to the Western Association of Architects in a body.

The association then adjourned, to meet on the second Monday of November, according to the by-laws, at such place as shall be selected by the board of directors.

THE CHICAGO MASTER HOUSE PAINTERS.

The master house painters formed an association four years ago, which from the start has been composed of the leading firms in the line of decorating and house painting in the city. The present officers are: President, J. G. McCarthy; vice-president, H. J. Milligan; secretary, B. S. Mills, and treasurer, N. S. Lepperr. They have lately fitted up new and elegant quarters at the southwest corner of Fifth avenue and Washington street, and organized in connection with it an exchange and dealers' exhibit, which was opened December 13. This project has been contemplated for some time, the necessity for an exhibit where the painting trade could display their work and wares being badly needed. The new quarters include a general exchange room, with chairs and tables, for meeting and trading purposes, and two ante-rooms. Thirty spaces have been arranged for exhibits of materials for the use of city manufacturers or those who are represented in the city. Spaces have already been taken by twenty-three firms, and the remaining spaces will, doubtless, soon be filled. A general meeting of all the master painters of the state is called for January 3, to form a state association. The association has already done an immense amount of good, not only toward elevating the general standard of work, but have increased the confidence of architects in the ability of Chicago decorators and painters to perform creditably any work placed in their hands for execution.

FIVE state associations hold their annual meetings in the month of January. That of the Wisconsin State Association will occur at Milwaukee, January 2; that of the Architectural Association of Minnesota, on January 3, at St. Paul; that of the Missouri State Association, at Kansas City, January 11; that of the Association of Texas Architects, at Austin, January 19, and that of the Kansas State Association, on the same date, at Wichita.

INTERESTING as the exhibition of drawings now being made by the Architectural League of New York may be, the attention of draftsmen is centered upon the competition for a memorial clock and bell tower upon a village green, in which gold and silver medals were offered as premiums. All parts of the country were represented, and forty-four drawings were submitted. In the decision, the West carried off the chief honors, James A. McLeod, of Minneapolis, receiving the gold medal, William Bryce Mundie, of Chicago, the silver medal, and Julius Harder, of New York City, William C. Noland, of Philadelphia, and Timothy F. Walsh, of Cambridge, Mass., receiving honorable mention. In congratulating Messrs. McLeod and Mundie upon their success in competing with the best draftsmen under twenty-five years, and receiving the first medals we remember having been issued to draftsmen in this country for competitive drawings, we note two things as significant: that there are good draftsmen, not only skillful in designing but skillful in rendering their designs, and that there is an architectural talent in the West equal to any; the latter fact being a matter of congratulation among the fraternity of draftsmen in both East and West, though with the latter it is almost with an apology, as they are substantially recompensed for their labor, while the representatives of the former have to be content with "honorable mention."

ARKANSAS SOCIETY OF ENGINEERS, ARCHITECTS AND SURVEYORS.

About thirty architects, engineers and surveyors met at Odd Fellows' Hall at Little Rock, November 10, 11 and 12, and formed a state organization.

The officers elected were: President, Fred. J. H. Rickon, C. E., city engineer, Little Rock; vice-presidents, A. B. Matson, city engineer, Texarkana; Thomas Harding, architect, Little Rock; B. S. Wise, county surveyor, Prangburn; treasurer, Major J. H. Haney, sanitary engineer, Little Rock; recording secretary, Frank W. Gibb, C. E., mining engineer, Little Rock; corresponding secretary, Prof. J. M. Whitham, Fayetteville.

The sessions were exceedingly interesting, papers being read upon various professional subjects, and in the interim the local committee, assisted by the citizens of Little Rock, entertained the visitors in a sumptuous manner. At a banquet given the evening of the second day, the association was honored by the presence of Governor Hughes. The invitation cards were unique, being sketched by one of the committee, and represented pictorially the three professions composing the organization, and executed by the blue print process. The next meeting will be held at Little Rock during the session of the exposition.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS.

The association met at Louisville on December 14, and held an interesting meeting.

As the membership of the association is largely local, comprising almost all the architects of Louisville, the advisability of organizing as a local chapter was considered. The meeting was principally occupied in discussing the advisability of drafting a building law for the city, there being at present no laws or regulations pertaining to the erection of buildings. After considerable discussion, a committee, consisting of C. J. Clarke and Henry Wolters, was appointed to confer with the city engineer, and draft a building ordinance and report the same to the association.

Obituary.

JOSEPH R. BODWELL, president of the Hallowell and Bodwell Granite Companies, died at Hallowell, Maine, December 15. The press reports give the following biography:

Governor Joseph R. Bodwell was born in Lawrence, Massachusetts, on July 18, 1818. His father was very poor, so that while still a lad he was thrown upon his own resources. When eight years old he went to live with his uncle, a farmer, with whom he remained eight years. Until twenty years of age he learned the trade of shoemaker, attending school at the same time. He then purchased a small farm and ten years later laid the foundation of his fortune. Bodwell obtained a contract to haul granite for the construction of a dam at Lawrence, and, after acquiring the details of the granite business, formed a partnership with Moses Webster on Fox island. Some time after the Bodwell Granite Company was organized to quarry granite on the coast of Maine, where the granite islands had until then never been touched. Many of the public buildings of the country have been constructed with granite quarried by the Bodwell company. The Hallowell Granite Company, which produces ornamental granite, was formed later by Mr. Bodwell. By honest dealings and shrewd business tactics he had accumulated a fortune of several millions. He was twice mayor of Hallowell, and twice elected to the state legislature. He was elected governor in November, 1886, and entered upon the duties of the office on January 1, 1887.

George R. Bodwell, nephew of the deceased, and western manager of the Bodwell Granite Company, was with him at the time of his death.

JAMES SIMS TROWBRIDGE, one of the youngest and most promising of the architects of Cincinnati, died, after a brief illness, at his residence in that city, December 13. Although Mr. Trowbridge was but in his twenty-fifth year his work has already made its impression in the local residence designing of Cincinnati, some of the most tasteful and picturesque suburban houses on the hills about the city having been designed by him. Entering the office of Architect E. Anderson in June, 1879, and afterward a short time with Architect Franklin, he rapidly acquired taste and skill, and left Cincinnati to continue his studies at the Boston School of Technology. Returning to Cincinnati he entered into a partnership with his former employer, Mr. Anderson, which continued until his ambition suggested a year of travel in Europe. This was accomplished in company with his friend, Mr. Plympton. Upon their return they entered into a partnership, under the style of Plympton & Trowbridge. Among the many residences designed by Mr. Trowbridge, and remembered by visitors, are those for Chas. Kebler, and Eliot H. Pendleton, Jr. Especially noticed is the Hubbard residence at Clifton, the lower story of which is rough boulder and the upper half timber construction. The crematory is also his design. There is a fine Italian feeling observable in most of Mr. Trowbridge's best work, though with the exception of the crematory this style is not especially marked. He was one of the best water colorists in the profession; his rendition of line drawings was striking, and his work bears the stamp of a peculiarly refined and artistic mind, giving promise of much professional success. The Cincinnati chapter of the Association of Ohio Architects, of which he was a member, passed suitable resolutions in his memory.

JOHN C. COCHRANE, architect, died at his residence at Chicago, December 13, in his fifty-sixth year, after an illness of but six days. Born in New Boston, New Hampshire, November 8, 1833, after receiving an academic education he came to Chicago in 1855, and was employed for some time in the office of Architect E. Burling. A year later he opened an office in Davenport, Iowa, and for the next two years designed most of the principal buildings erected there. In 1864 he came to Chicago to reside permanently. He made a specialty of public buildings, and the Northwest is dotted all over with monuments to his professional skill. In Chicago the structures with which his name is most commonly connected are the Chamber of Commerce, corner of La Salle and Washington streets, the Cook County and Michael Reese hospitals, Rush Medical College, First Presbyterian Church, Jefferson Park Presbyterian Church, Church of the Messiah, and Central Baptist Church. Besides these public buildings he designed many private residences in the city. Even in his social relations he was always on the alert for business—not offensively so, but enough to characterize him as a typical Chicago man—and he secured many large commissions when to all appearances he was simply indulging himself in a little recreation. He was twice married and leaves three children.

Mosaics.

THE cut illustrating the Byrkit Hall sheathing lath, in the advertisement of that material, in December number, was reversed. Any practical mechanic or architect would see the mistake at once, and understand the correct application of that excellent sheathing lath.

THE correspondent for the Chicago *Tribune* at Austin, Texas, reports that Architects Harrod, of Walters & Harrod of New Orleans, N. J. Clayton, of Galveston, and E. T. Heiner, of Houston, appointed by the governor to examine the new capitol, after a thorough examination state that the dome is absolutely safe and less than an inch out of plumb. This investigation was ordered because of reports that the dome was not safe.

THE great Opera House at Vienna had to be closed recently because of a breakdown in the electric light apparatus, caused by the cracking of the plates in the boilers, which were of Austrian manufacture. A complete new plant of boilers, amounting to 750 horsepower, has been ordered of the Glasgow house of the Babcock & Wilcox Company, and it is expected that they will be ready for service in two weeks from the date of the order, which, if accomplished, will be remarkably quick work.

ARCHITECT MIFLIN E. BELL, recently supervising architect of the United States, has established himself in private practice in Chicago, locating in the Insurance Exchange building. Mr. Bell's experience as supervising architect during a period when a larger number of public buildings were designed and projected than during that of any other incumbent, should bring to him a large and important clientele. His handsomely fitted offices have many of the designs of the more important buildings executed by him hung upon the walls.

A FRENCH military engineer, M. Bonnetond, has put dynamite to a new use in building foundations in wet ground. In the construction of fortifications at Lyons a hole is bored in the wet ground ten or twelve feet deep and an inch and a half in diameter. The explosion of a string of dynamite cartridges enlarges this hole to about a yard in diameter, and forces the water so far out beyond the sides of the cavity that at least half an hour is required for it to find its way back. This gives the workmen time to introduce quickly setting concrete. The process is very rapid.

QUICK WORK.—The "Firmenich" boiler at the mill of the Plant Milling Co., St. Louis, exploded October 3, destroying the boiler house and wrecking the Babcock & Wilcox boiler by its side. As soon as the debris could be cleared away and the facts investigated, a telegraphic order was sent to the Babcock & Wilcox Co. for two new boilers of 500-horse-power, and in *four days* the same were on the cars ready for shipment. This is doubtless the quickest time on record where so large an amount of boilers were supplied on an unexpected demand.

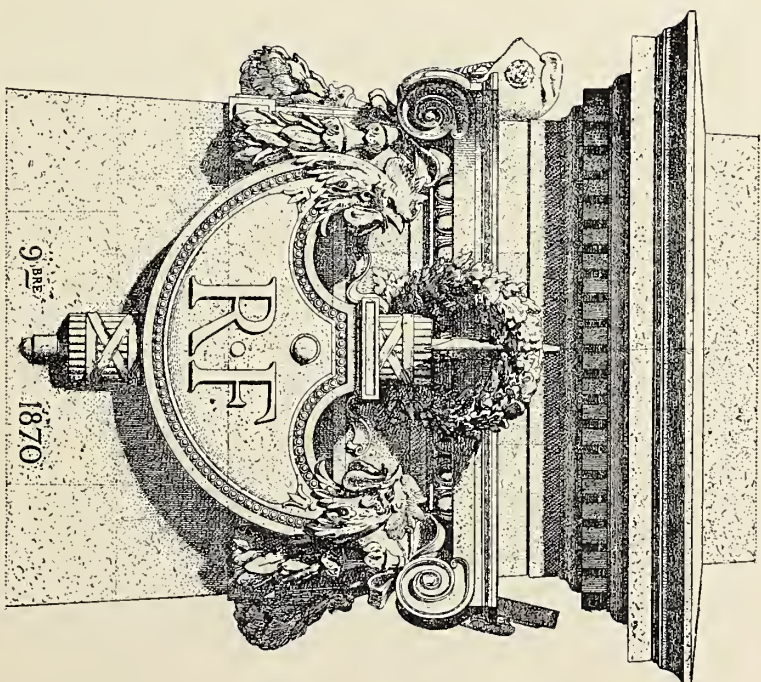
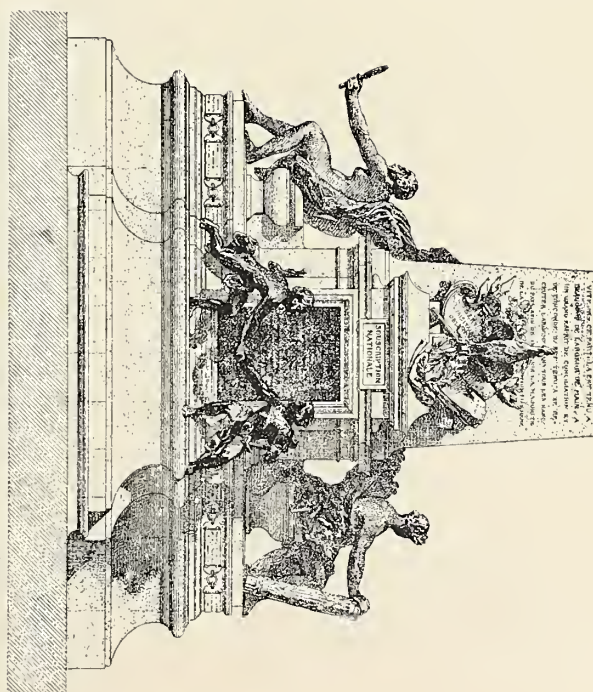
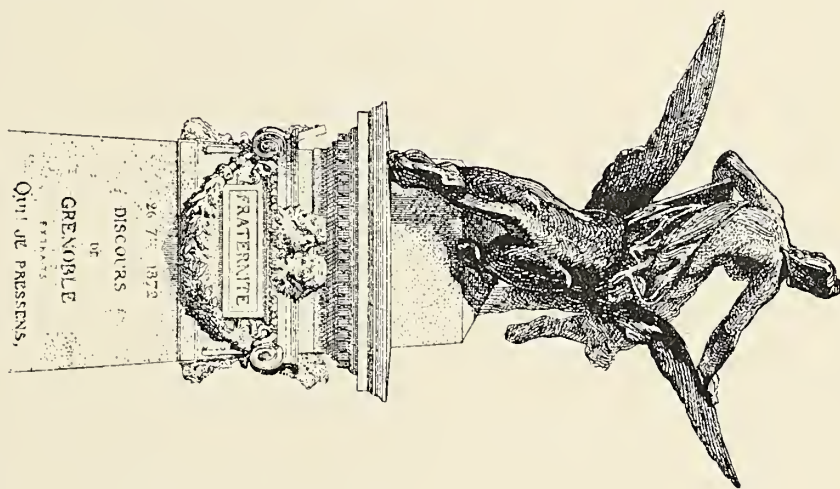
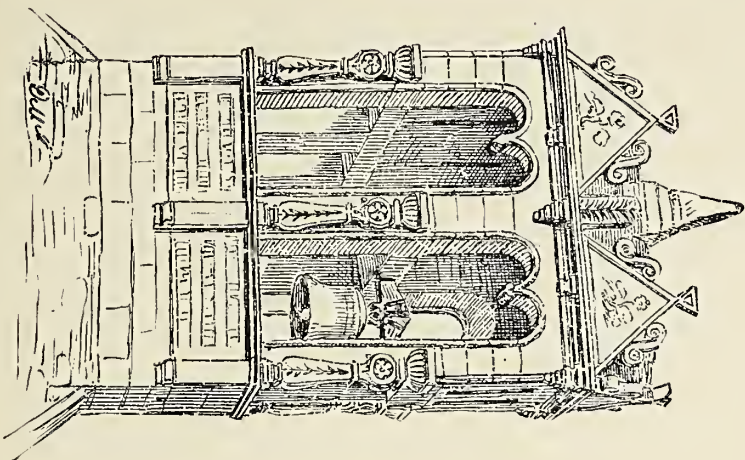
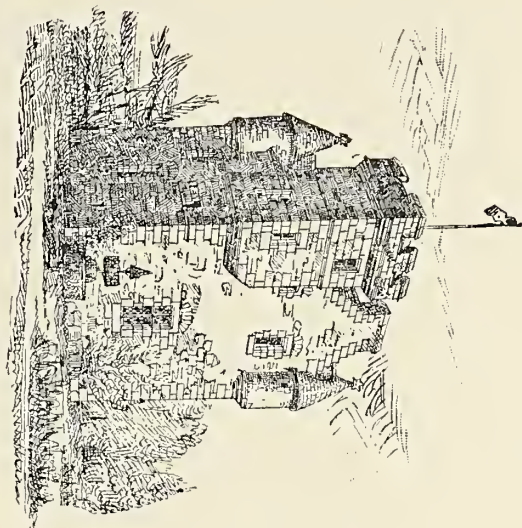
AMONG the many concerns that have entered into the field of contracting in Chicago of late years there is none which deserve recognition and support more than that lately formed under the style of Hayken & Newberry, interior decorators, house painters and sign writers, at 131 Wabash avenue. Mr. Hayken is well known in Chicago as a practical decorator, his work as foreman for many years for one of Chicago's foremost decorators being found in many of the finest residences in the city. Mr. Newberry is a young man of enterprise and business integrity, that, with Mr. Hayken's practical knowledge will give the firm a standing among its patrons for efficient and reliable work.

It is hardly necessary to call the attention of architects to the Star Ventilator, as its merits have become pretty well known to the profession, yet there may be some who have not had the opportunity to observe its working to whom a simple mention of some of its claims for general adoption may not come amiss, as it is not on record where it has failed to cure a gassy or smoky chimney, and withal is said to be a ventilator *par excellence* for rooms, vaults, etc. Besides its capability to do good work, it is claimed for it that its ventilating area is greater than any other; is handsome, noiseless, durable, storm-proof, simple and cheap. The United States government has adopted it after a competitive trial.

N. & G. TAYLOR & Co., importers and dealers in roofing tin plate, in announcing the contract recently secured by them for roofing Independence Hall at Philadelphia, call attention to the fact that the old copper roof was removed and tin substituted; that all the leading brands of tin were submitted to the judges, and the unanimous opinion was passed in favor of the old style as being the heaviest coated of the samples submitted. They also call attention to the marble roof of Girard College, which is being replaced by roofing tin, the marble having crumbled in many places. The firm also state that they have samples of "old style" tin that has been on roofs for forty-four years, which was found to be as good as when put on.

THERE is a church in Boston the tower of which, according to an exchange, is not owned by the society that owns the church. It is the Brattle Square Church, now owned by the First Baptist Society. The church is one of the earlier works of Architect H. H. Richardson, and the tower, with its frieze in colossal reliefs by Bartholdi, the sculptor of "Liberty," is such an adornment to Commonwealth avenue that when there was a prospect of the church being torn down there was one of the characteristic Boston movements started to "save" it. Nothing was accomplished except the creation of some public sentiment, but when the young millionaire, J. Montgomery Sears, who bought it, sold the church to its present owners he reserved the tower and deeded it in trust to the Memorial Society, to be preserved forever as a public monument.

THE first number of the *Technology Architectural Review*, published by the architectural department of the Massachusetts Institute of Technology, of Boston, will appear about January 1. The work is undertaken by the Architectural Society, which is composed of energetic young men, who desire to help their alma mater and themselves by placing before the public the highest work of the Department of Architecture. With the exception of *Croquis* (the journal of the Ecole des Beaux Arts) this journal is alone in the field. They hope to establish a publication devoted entirely to



academic architecture, and to place this publication in the hands of less fortunate students, and so place before them the best examples of design executed under scientific instruction by the advanced students of the Institute. It will be edited and managed by Henry D. Bates, assisted by Thomas R. Kimball and an advisory board of eight of the leading architects of Boston.

MERCHANT & Co., of Philadelphia, recently moved into their new and elegant quarters, 517 Arch street. Their new structure is 25 by 290 feet, running through to Cherry street, and is replete with all conveniences conducive to the expeditious handling of the bulky products they deal in. The 17,250 square feet of warehouse room is made easily accessible from one portion to another by a system of tramways, with switches and side-tracks connecting with the elevators, shipping and receiving rooms. The counting room and offices occupy a handsome suite 25 by 100 feet in extent, finished in antique oak, and with colonial fireplaces. The shipping room rests on solid masonry, has a carrying capacity of 7,000 pounds to the square foot. The second floor is constructed to sustain a strain of 1,500 pounds to the square foot, and the third floor 1,000 pounds. In a few days Merchant & Co. will be settled in their new quarters, and will be pleased to welcome their friends and patrons to their new home, which, if it were all on one floor, would extend over one-eighth mile long.

THE Wight Fireproofing Company, of Chicago, have commenced work upon the Westinghouse building at Pittsburgh for the Philadelphia Company, the syndicate controlling the natural gas system of Pittsburgh. This building, of which Andrew Peebles, of that city, is architect, will be eight stories high, and will be the first building in Pittsburgh to be completely fireproofed with hollow tile upon the Chicago plan, and complete in floors, partitions and roof of that material, as understood as "complete fireproofing" in the latter city. The Wight Company have also in hand the fireproofing of a new brewery for the K. G. Schmidt Brewing Company, of Chicago. This building will be lined throughout with salt glazed tile instead of plaster or other finish. Also the complete fireproofing of the Joseph Schlitz Brewing Company's building, of Milwaukee. Fred Wolff, of Chicago, is architect of both breweries. The Chicago telephone building, J. L. Silsbee, architect, is also being fireproofed by this company. The work in this structure is very heavy, many twelve inch arches being used. The complete fireproofing of the American Insurance Company's building at St. Louis, the general offices of the St. Paul, Minneapolis & Manitoba railway, and the United States government building at Fort Wayne, are among other large fireproofing contracts now being executed by this company.

THERE is an art in presenting one's thoughts perfectly, which everybody recognizes who desires to express his ideas to another, yet so seldom understood beyond the mere vague recognition of its existence, that to the million it may be said to be not a lost art, but apparently an unattainable one. Once in a great while a happy exception to this general rule is met with, as in the case of the unique catalogue of the Anderson Pressed Brick Company, which we find on our table. In the first place, the catalogue is neatly and substantially bound; and the paper is of a high grade. The letter-press matter is explicit and concise, just enough to set forth in terse language the superiority of the company's manufacture, and the reasons why, viz.: in the scientific treatment and manipulation of the clays, the enormous pressure put upon it in the molding, and the consequent uniformity of the brick in size and shape, straight edges and smooth faces. Again, the uniformity of tints of color in the brick, as well as in the forms, wherein whatever shade or tint may be selected, no variation of hue can be discovered in the walls. So, too, the resistance of the brick is treated of, showing an almost incredible resisting power to the square inch. Following the letter-press is the catalogue proper, where a large number of artistically executed designs of panels and ornamental bricks are found. Supplementary to the above, the catalogue is beautifully illustrated by engravings of prominent buildings in this city and elsewhere, in which the Anderson pressed brick have been used in the construction. A feature of this catalogue is that it has been so devised that any subsequent changes or novelties made by the company can be conveniently added.

Synopsis of Building News.

Bessemer, Ala.—Architect John Sutcliffe, of Birmingham, reports: For Carolina Real Estate Co., four-story brick and terra-cotta building, 300 by 80 feet, marble ground story and trimmings; cost \$125,000; under way; McCrossin Bros. & Thomas, builders. For a syndicate, two-story brick and terra-cotta building, 300 by 75 feet, tin roof; cost \$45,000; started; McCrossin Bros. & Thomas, builders. For John Polis, two-story brick store, 25 by 80 feet, marble front; cost \$4,000; projected; contract not let.

Buffalo, N. Y.—Architects Swan & Falkner: For Mrs. Marsh, frame residence; cost \$4,000. For Mr. Ballou, frame residence; cost \$5,000. For H. L. Schwartz, brick and frame residence; cost \$7,500.

Architect W. W. Carlin: For Mrs. J. L. Moore, frame residence; cost \$4,500. Architect E. A. Kent: For W. S. Shepard, brick residence; Jacob Beier, builder. For O. C. Burdick, brick residence; J. H. Tilden, builder.

Architect H. H. Little: For Hoddick & Co., brick stores, etc.; Schmidt Bros., builders.

Chicago, Ill.—Architect S. V. Shipman: For Presbyterian Hospital, five-story brick and brownstone addition to present buildings; cost \$150,000. For Eckert & Swan, six-story warehouse, 140 by 90 feet, Market street, near Randolph; cost \$150,000. For same parties, five-story mill, 45 by 56 feet, Clinton and Fulton streets.

Architect A. Cudell is preparing plans for a three-story stone residence, 74 by 90 feet, on Drexel boulevard; to cost about \$200,000.

Architect S. S. Beman has prepared plans for an office building for the Omaha Bee Publishing Co.; to cost \$350,000. For Lake Erie & Western R. R. Co., four-story building in Indianapolis; cost \$40,000.

Architect Fred Keltenich has prepared plans for George Edwards for a three-story store and apartment building, 60 by 110 feet; cost \$34,000.

Architect F. R. Shock has prepared plans for J. C. Craig for thirteen one-story stores, 36 by 124 feet; cost \$25,000.

Architect H. R. Wilson has plans for W. H. Thomas & Co., for stone and pressed brick flat building, 150 by 155 feet; cost \$125,000. For T. H. Glassbrook, two-story and basement dwelling, 20 by 90 feet; cost \$7,000.

Architects Beman & Parmentier: For Royal Arcanum, Hyde Park, club house; cost \$10,000. For W. G. Ferguson, frame residence, 40 by 50 feet, at Morgan Park; cost \$10,000. For Dr. Holcomb, two-story brick stores and flats, at Kensington; cost \$10,000. Remodeling the John A. Logan residence for Geo. M. Moulton, present owner; cost about \$15,000.

Architect W. W. Boyington: For John Pearson, flat building, 829 Warren avenue; cost \$7,000. For the Western Refrigerating Company, six-story brick warehouse, 80 by 180 feet; cost \$60,000; John Angus, contractor. For Western Warehouse Company, four-story brick warehouse, 140 by 160 feet; cost \$60,000; John Angus, contractor.

Architect Geo. H. Edbrooke: For C. L. Willoughby, two-story warehouse, 32 by 82 feet; cost \$65,000.

Architect C. O. Hansen: For N. C. Bartholdy, three-story and basement store and flats, 25 by 75 feet; cost \$8,000. For A. Delfosse, three-story and basement store and flat building, 25 by 75 feet; cost \$9,000.

Architects Cobb & Frost: For W. H. Warren, three-story brick and stone residence, 19 by 68 feet; cost \$10,000; under way.

Architects Treat & Foltz: For W. L. Bigley, two-story stores and flats, 54 by 66 feet; cost \$12,000.

Architect Perley Hall has prepared plans for F. Messick for stores and flats on Cottage Grove avenue; to cost \$18,000.

Architects Ostling Bros. have prepared plans for H. F. Lundgren, for a store building; to cost \$10,000.

Architect C. M. Palmer has prepared plans for F. L. Brand for a store and flats at 1223-25 Wabash avenue; cost \$10,000.

Architect O. J. Pierce: For N. R. Wakefield, three-story and attic pressed brick and brownstone residence; cost \$18,000.

Detroit, Mich.—Architect W. G. Malcomson reports: For Working Women's Home Society, three-story brick and stone building, 80 by 100 feet, slate roof; \$25,000; under way; Topping & Fisher, builders. For Mrs. M. E. Compton, two-story brick and stone dwelling, 44 by 62 feet, slate roof; cost \$9,000; Geo. Graham, builder. For C. H. Haberman, four-story brick factory building, 42 by 115 feet; cost \$7,000; W. H. Holland & Son, builders. For Eugene Sullivan, two-story double dwelling, 48 by 62 feet, brick and stone; cost \$6,500; W. H. Holland & Son, builders.

Architects Donaldson & Meier report: For Henry Munsch, two-story brick and stone dwelling, 30 by 40 feet; cost \$4,500.

Board of Education, two-story brick and stone school building, 125 by 75 feet, slate roof; cost \$35,000; Jeynes & Son, builders. Also two-story brick and stone school building, 72 by 97 feet, slate roof; cost \$23,000; John Finn, builder.

Architects Spier & Rohns report: For Smith Pierson, two-story frame dwelling, 30 by 46 feet; cost \$4,500; A. Hild & Co., builders. For L. T. Witzleben, two-story brick double dwelling, 40 by 62 feet; cost \$5,100; Conrad Swartz, builder.

John E. Evans, alterations to four-story store building, 25 by 100 feet, brick; cost \$5,000; Richmond & Harris, contractors.

Architect Peter Dederichs reports: For J. Dickinson, two-story frame dwelling, 30 by 64 feet; cost \$3,400; James Collett, builder.

Architect Bradford L. Gilbert, of New York City, reports: For J. S. Newberry Estate, brick and stone Presbyterian Memorial Chapel, 100 by 70 feet, slate roof; cost \$50,000; Topping & Fisher, contractors.

Henry Kock, two-story brick dwelling, 26 by 65 feet; cost \$4,000; C. Swartz & Son, builders.

Architects Mason & Rice report: For Louis Jones, two-story brick and stone dwelling, 32 by 58 feet, slate roof; cost \$7,000; Henry Carew, builder. For O. L. Clark, three-story brick and stone dwelling, 95 by 78 feet, slate mansard; cost \$17,000; Gideon Vivier, builder.

Architects Hess & Raseman report: For James Hanley, two-story brick and stone double dwelling, 43 by 60 feet, slate roof; cost \$9,000; Patrick Dee, builder.

Architects Scott & Co. report: For James Dwyer, two-story brick and stone dwelling, 46 by 68 feet, slate roof; cost \$12,500; Henry Carew, builder.

Architects Mortimer L. Smith & Son report: For J. W. Jamieson, two-story brick and stone double dwellings, 39 by 63 feet, slate roof; cost \$8,000; W. H. Travers, builder.

Architects Spier & Rohns report: For Peninsular Brewing Co., two-story brick office and bottling works, 46 by 43 feet; cost \$5,000; A. Dorsch, builder.

John Boeberitz is building a two-story brick brewery, 73 by 36 feet, for Thomas McGrath; cost \$4,000.

A. Hild is building a two-story frame dwelling, 38 by 68 feet, for Chas. Endriss; cost \$3,600.

Wm. H. Gibson is building for himself two two-story frame dwellings, 20 by 56 feet each; cost \$4,000.

Geo. H. Whitaker is building for himself, two two-story frame dwellings, 22 by 70 feet each; cost \$4,500.

F. H. Bauslet is building for himself, two two-story frame dwellings, 24 by 45 feet each; cost \$5,500.

Building permits were issued during November as follows: New buildings, to cost \$381,915; alterations, to cost \$10,200; total cost, \$392,115.

Fort Smith, Ark.—Architects Lee & Roth report: For Cumberland Presbyterians, rock-faced stone church building, in Romanesque style, yellow pine interior; cost about \$10,000. For M. Enper, frame dwelling; cost \$2,000. For W. Johnson, frame cottage; cost \$1,800. For Chas. L. Andrews, double tenement house; cost \$3,000.

Fort Wayne, Ind.—Architects Wing & Mahurin: For St. Paul's Lutheran Society, brick and stone church building, 60 by 145 feet, cost \$50,000.

Forstoria, O.—Architect Oscar Cobb, of Chicago: For John Andes, remodeling theater building; cost \$15,000.

Litchfield, Ill.—Architect H. E. Peppers, of St. Louis, Mo., has prepared plans for Thomas Rhodes, for a three-story brick store and opera house building; to cost about \$25,000; contracts sub-let.

Little Rock, Ark.—Plans are being received for rebuilding the Athletic Club, recently destroyed by fire, also for a new dormitory building for the Pine Bluff branch of the Arkansas Industrial University. Each of them are to cost about \$7,500.

Mansfield, Ohio.—Architect Oscar Cobb, of Chicago: For Library Society, hall and library building, brownstone front; cost \$100,000; under way.

New Corporations.—Cary, Ogden & Parker, at Chicago; capital stock \$150,000, for the manufacture of paints, oils, lead, colors, materials and machinery; incorporators, W. H. Cary, N. F. Gordon and Thomas Cratty. The Hampton Falls Marble Company and the Valido Marble Company have consolidated at Rutland, Vermont, with a capital stock of \$500,000; J. B. Reynolds, G. H. Cheney, W. H. Johnson and others, incorporators. The Hardy Moore Manufacturing Company, of Jersey City, has been incorporated, to manufacture wire goods; capital stock, \$100,000; John B. Hardy, 484 Willoughby avenue, Brooklyn; Lindley Murray and W. Euclid Young, of New York City, incorporators. The Economic Furnace Company, Chicago; capital stock, \$600,000; incorporators, L. M. Thomas, G. W. Carson and A. McLaughlin. The Columbia Brick Company (Limited), of Coxsackie, N. Y., has been incorporated; capital stock, \$36,000; James R. Burdett, of Stockport; Thos. H. Rebank, of Coxsackie; Chas. R. Hitchcock, of Coeymans, and Everett W. Burdett, of Boston, Mass., incorporators.

St. Louis, Mo.—Architect H. E. Peppers: For Chas. F. Kraus, three-story brick and stone store building, 27 by 65 feet; cost \$6,000. For German Catholic congregation, three-story brick and stone school building, 50 by 118 feet, slate roof; cost about \$20,000.

Architect E. C. Janssen: For Wm. Waters, factory building; to cost \$12,000; B. Weber, contractor. For Mrs. L. Sporing, two two-story dwellings, 38 by 50 feet; cost \$7,000.

Architect James B. Legg: For Wm. Barnard & Co., two-story double store building, 95 by 85 feet, brick and stone; cost about \$9,000. Also preparing plans for a two-story brick and stone flat building, 34 by 68 feet, for himself; cost \$8,500; S. L. Jones, builder.

Architect August Bienneke: For German Evangelical Society, one-story brick and stone church, 45 by 75 feet; cost \$7,000. For Mrs. Diedrich, two-story brick and stone residence; cost \$10,000.

Architect Isaac Taylor: For J. Gerardi, one-story building, 83 by 138 feet; cost \$15,000.

Architect Geo. W. Pipe: For Bowman Milk Company, three-story stable, 40 by 95 feet, with flats above; cost \$12,000. Also made plans for five two-story dwellings, 21 by 50 feet; brick and stone; cost \$16,000.

Architect Irwin Thayer has prepared plans for a two-story brick and stone dwelling, 31 by 58 feet, for M. A. Boone; cost \$10,000.

San Francisco, Cal.—Architects Burnham & Root, of Chicago, report: For W. C. De Young, proprietor of the San Francisco Chronicle, an office building. The lot front is an obtuse angle, 90 feet front by 50 deep. The building will be ten stories with a tower, in height approaching 200 feet. The first two stories will be of granite, with pressed brick and terra-cotta above. It will be thoroughly fireproof.

Railroad Notes.

THE great Rock Island offers choice of routes, either via Union Pacific, D. & R. G., A. T. & S. F., or Missouri Pacific, from the Missouri river. Rates as low as the lowest. Round-trip tickets on sale at frequent intervals. For tickets, sleeping-car berths, and full particulars call at ticket office, 104 Clark street, Grand Pacific Hotel, Palmer House, or depots on Van Buren and Clark and Twenty-second streets.

TO DENVER IN ONE NIGHT.—On December 4, 1887, the Burlington route, C. B. & Q. R. R., inaugurated a fast train service as follows: Fast express train known as "The Burlington's Number One," leaves Union depot, corner Canal and Adams streets, Chicago, at 12:01 P.M. daily and runs to Denver solid, arriving at 10 P.M. the next day, thus making the run from Chicago to Denver in thirty-four hours. This train arrives at Omaha at 5 A.M., making the run to Omaha in seventeen hours. Corresponding fast train from Denver to Chicago. Direct connection made to and from St. Louis with these trains, and at Denver with the fast train of the D. & R. G. R. R. for San Francisco and Pacific coast points. Superb equipment on "The Burlington's Number One," consisting of sleeping cars and coaches from Chicago to Omaha and Chicago to Denver without change. Meals served en route on the famous Burlington route dining cars as far west as the Missouri river. Omaha passengers will be allowed to remain in their sleeping cars until breakfast time. See that your ticket reads via the C. B. & Q. R. R. It can be obtained of any coupon ticket agent of its own or connecting lines, or by addressing PAUL MORTON, General Passenger and Ticket Agent.

FAST TRAINS to Omaha, Denver, San Francisco and the Pacific coast. Local trains to Kansas City and St. Joseph, Mo. Sunday, December 18, the Chicago, Milwaukee & St. Paul railway commenced running a fast train, with through sleeping cars, from Chicago, at 7:30 P.M. daily, arriving at Council Bluffs at 11:30 A.M. next day, making connection with the "Overland Flyer" of the Union Pacific railway for Denver, Salt Lake City, San Francisco, and all points on the Pacific coast. This train also has a through sleeping car for Sioux City, arriving at that point at noon.

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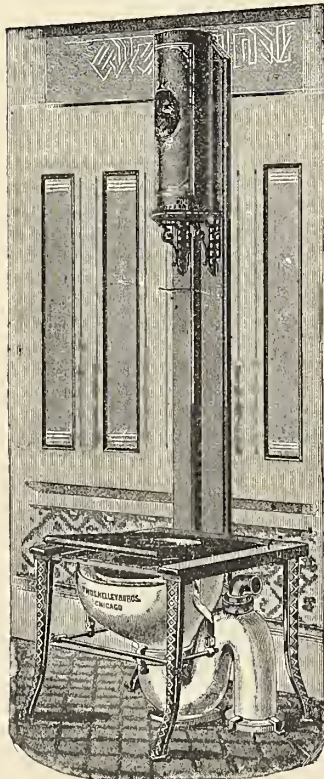
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Construction, Decoration and Furnishing

IN THE WEST.

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Committee to Collect Legal Decisions Relating to Building Interests—Missouri: Chas. C. Helmers, Jr., St. Louis; Adriaance Van Brunt, Kansas City; T. B. Annan, St. Louis. Kentucky: C. A. Curtin, Louisville; H. P. McDonald, Louisville; Mason Maury, Louisville. Tennessee: Wm. C. Smith, Nashville; James F. Baumann, Knoxville; Chas. C. Burk, Memphis. Minnesota: F. G. Corser, Minneapolis; G. M. Godwin, Minneapolis; D. W. Millard, St. Paul. Texas: S. A. J. Preston, Austin; James J. Kane, Fort Worth; N. J. Clayton, Galveston. Nebraska: G. L. Fisher, Omaha; Geo. W. Field, Omaha; Louis L. Mendelshon, Omaha. Michigan: John M. Donaldson, Detroit; Dillon P. Clark, West Bay City; Jack Rice, Detroit. Illinois: Fred Baumann, Chicago; R. C. Berlin, Chicago; Wm. Holabird, Chicago. Indiana: B. Vonnegut, Indianapolis; J. W. Reed, Evansville; J. F. Wing, Fort Wayne. Ohio: J. W. Yost, Columbus; E. O. Fallis, Toledo; S. E. Des Jardins, Cincinnati. Kansas: J. G. Haskell, Topeka; E. T. Carr, Leavenworth; A. W. Haywood, Wichita. Wisconsin: Geo. B. Ferry, Milwaukee; H. C. Class, Milwaukee; W. A. Holbrook, Milwaukee. Iowa: E. H. Taylor, Cedar Rapids; F. D. Hyde, Dubuque; E. S. Hammatt, Davenport. Georgia: F. C. Bruce, Atlanta; A. McMurphey, Augusta; F. C. Morgan, Atlanta. New York: W. W. Carlin, Buffalo; Louise Bethune, Buffalo; J. G. Cutler, Rochester. Dakota: Albert E. Cobby, Yankton. California: Eugene L. Calkins, Los Angeles. Louisiana: Thomas Sully, New Orleans.

WITH this number we send to subscribers of the regular edition a specimen of our photogravure plates, with a view to introducing our photogravure edition to their notice. There are five of these plates in each number, the selections and photographs are made expressly for it. The price for the photogravure edition is \$8.

FOUR state associations of architects meet in the month of February. The Western New York State Association of Architects meets at Syracuse, February 7. The Architectural Association of Iowa meets (place not yet determined by the executive committee) February 8. The Association of Tennessee Architects meets at Memphis, February 16, and the Louisiana State Association of Architects meets at New Orleans, February 1.

THE National Association of Builders will hold its second annual meeting at Cincinnati, February 7. This association, made up, as it is, of the different builders' and traders' exchanges of the country, the conventions, composed of delegates from these, bring together each year a representative body of American builders. The Chicago Exchange, being the largest, sends ten delegates and one delegate at large; those of New York and Boston, coming next in size, send seven each. The work of the committees is already in a large measure completed, and their reports in the hands of the secretary, who has sent drafts of these to the different exchanges for consideration, so that their provisions may be thoroughly known to the delegates before they appear in convention. That this convention will show a large amount of work accomplished, and further outline much of vital importance to the building public, is a foregone conclusion, judging from the calibre of the men appointed to attend and execute the work.

M. R. C. H. BLACKALL commences the publication, in a late number of the *American Architect*, of a series of notes of travel, dealing in the first and second articles with Chicago. He discovered what New Englanders who have never been west of New York State are sometimes slow to acknowledge: that the West has something more to show for its brief and tumultuous activity than a conquest of physical obstacles and a utilization of crude conditions. He saw that the almost incomparable progress in industry and material pursuits had not been wholly at the expense of the beauty and refinement which give to mere commodity a value which it could not otherwise possess. The West very frankly admits the superiority of the East in a nice discrimination in matters of art and taste. If there were no such superiority among a people reared under the shadows of Harvard and Yale, within sound of the voices of Lowell and Emerson, of Longfellow and Hawthorne, there would be small prospect of a great future in art for the people of the United States. Culture is something to be imbibed from surroundings; to be acquired unconsciously by a process of assimilation, at least in so far as culture is within the reach of the majority of a people. The crudeness and artistic poverty of the West has a very different import from the crudeness and artistic poverty of the denizens of the western Carolinas or of northern Georgia. The latter is a crudeness and spiritual numbness born of inertia and retrogression; the former is a crudeness made compulsory by the necessity of concentration of energy on things temporal, but is characterized by no spiritual numbness or artistic paralysis. The West is conscious, in large measure, of its

crudeness, and regards it as a deplorable but temporary necessity, and intends that its children shall enjoy and exercise a wider reach of all their faculties, and shall more and more learn to look upon "living" as the vocation, and "getting a living" as an avocation; and so it comes to pass that the western town, unable as yet to do more than support its mechanics, goes ever one step eastward for its teachers, its artists, its architects, and thus the artistic perception and refinement of the East is steadily extending its frontier and gaining new vantage ground for further extension. The architecture of the West has been built up under these conditions, and is crude in much; but in a day when reputable eastern architects find it profitable to establish a branch office in the West, and the western architect seeks a clientage east and west, the New England pilgrim is not in danger of being too severely shocked by the public or private architecture of a western town.

IN our December issue we commented on the suit for fees which was threatened against a Michigan school board by a firm of architects whose plans and specifications, prepared at the request of the board, the board subsequently refused to accept unless the architects filed a bond that the maximum cost should not exceed a specified sum and that the building—to be erected on contract by the lowest bidder—should manifest no defect at the end of a year's time. The architects, whose bill was something in excess of six hundred dollars, being refused payment, brought suit for three thousand dollars; and the school board, on consultation with a lawyer, were told that they had no legal grounds on which to make a fight, and were advised to effect a compromise. The result was a compromise by which the architects received for their services three hundred dollars and retained the plans and all rights therein in consideration of a withdrawal of the suit. Of course, this dictum has not the authority which attaches to the decision of a court; but it is valuable as indicating the probable outcome of a suit instituted on such grounds, and sustains the view which we took of the merits of the case. The attorney whom the school board consulted has recently been elected circuit judge for a term of six years, and is therefore, presumably, a lawyer of recognized ability, so that his opinion may afford guidance to our readers in a like condition of affairs.

WHILE most architects of standing in the profession frankly admit that architectural competitions are almost invariably a delusion and a snare, discreditable alike to the intelligence, honesty and reputation of those who take part in them, and are prompt in announcing that for themselves they eschew them altogether; yet when invited to advocate their total abolition, they reply that while individual owners might be convinced of the dangerous risk to themselves of intrusting their work to a competition architect, this method of selection would remain the only one practicable with corporations, boards of directors, and the like, where each party might have his own preference, and decline to yield. Apart from the fact that similar boards and societies have occasion to choose attorneys, engineers, physicians and other professional employes, and that they always do it without a competition, there are occasional instances to be found where the same plan is successfully pursued with architects, or would be did not other architects themselves interfere. An instance of the latter kind occurred some months ago in Birmingham, England, where a new city hall was to be erected, at an expense of \$500,000. The authorities, with a discretion which few on this side of the water would be disposed to question, selected Mr. Alfred Waterhouse, one of the foremost architects in England, as their architect, without

requesting him first to submit plans in full for their building in competition, and at the risk of not being paid for them, a request which such men are apt to refuse if made. Unfortunately, however, the appointment was subsequently rescinded, in consequence of the clamor raised by the "local profession," and at their demand there is to be a competition. An instance of a more creditable character is reported from the town of Châlons-sur-Marne, France, where a municipal architect is to be selected, and where, with the sagacity in practical administration which so often appears in French affairs, the mayor publishes an advertisement, stating explicitly that there will be no competition, but that candidates were invited to send evidences of their proficiency, "*honorabilité intelligence et aptitude*" with references to the works they have designed and superintended.

WILLOUGHBY J. EDBROOKE, the Chicago commissioner of buildings, has drafted an ordinance regulating the construction and management of theaters, which should be passed by the city council and rigidly enforced. This ordinance is printed on another page, so that the architects of the city may study its provisions and use their influence to secure its passage, and to give to readers everywhere a general idea of what can be and what cannot be accomplished in the line of securing greater safety in theater construction. We do not wish it understood that we think anything short of a perfectly fireproof theater perfect; but since the government does not seem disposed to make this compulsory, and managers maintain that a thoroughly fireproof building, isolated from other buildings, without offices or stores connected with it to assist in defraying the expenses of its maintenance, would not pay as an investment, it is eminently proper that the recommendations contained in Mr. Edbrooke's ordinance should be carried out. He asks for what he thinks he can get rather than what he believes the law should be.

EVIDENCES that there is not only a great lack of means by which the young aspirant to architectural honors may become properly educated, but that the draftsman is making great efforts to educate himself are equally prominent to those who look into the signs of the times architectural. Indeed, it seems as though the draftsman, despairing of receiving the aid advanced by government, as in France, or by apprenticeship to an architect, as in England, he of the United States has decided that to himself and his fellow craft must he look for all advancement. This is largely the fact, notwithstanding that departments of architecture are part of the curriculum of many of the leading colleges of the land. This impression, part false but in a degree true, has gone abroad that these schools are in too large a measure theoretical, and that the graduate is still a novice when he enters an architect's office for practical work. Be this as it may, the draftsmen have begun to work out their own salvation. In New York the Architectural League, though composed of the leading New York architects, stands first and foremost as an organization for practical advancement in architectural knowledge, though, perhaps, not so much to benefit itself as to disseminate knowledge among those outside. This association has just closed its third annual exhibit of architectural drawing, and has crowned its efforts by giving medal prizes in a competition between draftsmen under twenty-five years of age. In the West, the Chicago Architectural Sketch Club takes the lead, and is a practical and model sketch club, where well-laid plans are carried out to the general instruction and advancement of its members. Not only did the annual exhibit of the club's work during the

year show remarkable advancement, but its progressive spirit has led to the leasing of elegant rooms, in the Art Institute which when fitted up will form an attractive professional home for all the draftsmen in the city. Buffalo and Kansas City have their clubs, largely modeled on the Chicago club plan, and equally progressive and instructive to the members. Last, but not least, the students of the architectural department of the Massachusetts School of Technology are about to publish a journal, with the two-fold object of helping their school and of giving to the draftsmen of the country the best results in studied design. All this points to one thing, and that is that the American draftsman is progressive and is not content to wait till a beneficent providence places in his hands a means of obtaining a higher education, but he grasps the problem himself and by interchange of thought with his fellows seeks to acquire what would otherwise be denied him.

IT gives us genuine pleasure to herald the production of an architectural journal that will not only occupy a distinctively new field in this class of journalism, but be a benefit to those who have the wisdom (it will require very little cash) to subscribe for it. This is the *Technology Architectural Review*, published by the architectural department of the Massachusetts Institute of Technology. We have received some advance sheets of the illustrations to be included in the first number, which will appear shortly, with an outline of what the journal is expected to do, and the field it is hoped it will find a cordial reception in. One of this journal's chief aims will be to place the resources of classical design, as developed under the best instruction and criticism, before the draftsmen of this country. The subscription price to draftsman is \$2, but as the expense of publication will of necessity be much greater than this, those so inclined can pay as much more as they think the cause which it advocates may merit. The plates of the first number are all in photography. These, five in number, show photographs of work produced by students, and include third year competitive drawings for a fountain in a public park, fourth year competitive drawings for a casino, etc. The designs will be accompanied by full descriptions in the letterpress. As the journal in its entirety has not reached us, its typographical or literary excellence cannot be spoken of here, but judging from the superior character of the illustrative sheets we do not fear that in this it may not please the most critical. Its advent will doubtless not only be received with a certain amount of curiosity, and its review win the approval of architects and draftsmen, but its publication should have a strong influence upon architectural education in this country.

OUR *honest* contemporary, who created all things, and, with his maiden modesty, parades his mighty works on all possible and impossible occasions, claims, in his latest utterance, that out of the funds of his institution "the expenses were not only paid for the two conventions held in Chicago by the Western Association of Architects, but also the preliminary work of calling together the first convention." Those who were familiar with the initiative work of the first convention, do not need THE INLAND ARCHITECT to tell them who was the principal factor, and bore its full share of the expense. But aside from this, the claim of our *honest* contemporary is a gross injustice to the Chicago architects who so liberally contributed a fund for expenses of the first convention, a part of which fund was used to pay for some of this same preliminary work. We have neither time nor inclination for a controversy with a contemporary who makes such wild statements, and in the same breath poses as the champion of honesty and high morality.

Photography in Architecture.*

PART III.—BY FRED D. FOSS.

AT the conclusion of the last article the announcement was made that the next article would be devoted to the development of the exposed plates. Upon reflection I find there are several things requiring mention and explaining, that the readers may have a definite understanding of the manner of safely handling dry plates before and after their exposure, and before development. One thing should always be remembered, and that is, *the least trace of white light will fog a plate*. It may not, if the light is weak and the exposure of short duration, entirely ruin the plate, but it will greatly injure its printing qualities. An explanation of "fog" may not be amiss. Fog is the accepted term for a veiling or haziness that shows itself upon development, and is caused by several reasons, the principal ones being: white light entering the darkroom from some unobserved crack in the partition or walls, or around the cracks of the door; and right here let me say to those who may contemplate arranging a darkroom under some stairway or in some closet, that when you think you have it perfectly light-tight and secure, to go into the room and shut yourself up for at least half an hour, and the chances are you will find several cracks, either around the door or in the partitions, that allow enough white light to enter to fog any of the rapid brands of plates. If after half an hour's "solitary confinement" you discover no trace of white light, you may then regard your darkroom as safe so far as intruding light is concerned. The next danger to be guarded against is the developing light, which should be either gas, lamp or candle light, thoroughly protected by what is known to the trade as copper-flashed ruby. In using lamp or candle light, one thickness of glass is considered safe, but in using a strong flame of gas two thicknesses may be necessary; however, this is easily ascertained in the following manner: After thoroughly satisfying yourself that your darkroom is free from actinic light, place, in total darkness, a small-sized plate in the plate-holder, close the holder and light whatever medium you have selected to develop by, then draw the dark slide about one-quarter of its length from the holder, and expose it within eight inches of the ruby glass for not less than five minutes, and then proceed with the development as though it was an exposed negative. If the plate remains perfectly clear (showing plain clear glass upon being fixed), you may consider your light as safe and proceed in contentment; but if traces of fog are seen upon the exposed part of the plate, place a piece of red tissue paper over the ruby glass and again expose another plate. Repeat this operation until no haziness or fog is seen, and your light is then secure. Another cause of fog is imperfect plate-holders and cameras, which should be closely and carefully inspected for minute holes. Remember that the camera and plate-holders are to be used in strong daylight, and if any particle of white light is allowed to enter it will be quite disastrous to the plate. These minute holes in the cameras are usually found around the joining of the bellows and frame, but sometimes they appear in the bellows proper, and careful search must be made for them. The usual leak in the plate-holders is in the opening for the slide. This is remedied by pasting or gluing a narrow strip of black velvet, face down, upon the slit, and after it is dry cutting through it with a sharp knife. Care must be taken that none of the glue or paste enters or runs down the slide opening, as this would cause small lumps in the passageway, and result in the slide springing the frame of the holders enough to admit white light. One cannot be too careful about actinic rays striking the plate before you are ready to have it do so through the proper channel, i. e., the lens. After satisfying yourself that your darkroom, camera and plate-holders are safe, you can proceed to open the box of dry plates in the darkroom, illuminated by the developing light, care being taken not to expose the plates any longer than is necessary to the light. Take a plate from the box and carefully dust the film, which can easily be detected from the glass side by its mat or dead-looking surface, with a camel's hair brush, about two inches wide. This brush must not be used for any other purpose, and must not be allowed to come into contact with the hands or any article which will cause the brush to become greasy; then place the plate in the holder, with the film side toward the slide, carefully close the holder, and your slide is ready for the camera. Should you have a plate-holder of the "book" pattern, it will be unnecessary to remove the slides while inserting the plates; but this form of holder is not quite as convenient as the regular model, as there is a partition which is placed between the plates, and must be removed to insert both plates. This partition fits but one way, and you usually find about thirty wrong ways before striking the right one, especially if you happen to turn the partition in removing it from the holder. The usual form of holders, that take the plates film side out, are to be preferred. One important thing is not to forget to securely close your box of plates, and put it in a safe place before opening the darkroom door, as you might lay the charge of fog at the plate-maker's door.

(To be continued.)

* Continued from Vol. X, No. 7, page 73.

Venetian Byways.

BY IRVING K. POND, C. E., ARCHITECT.



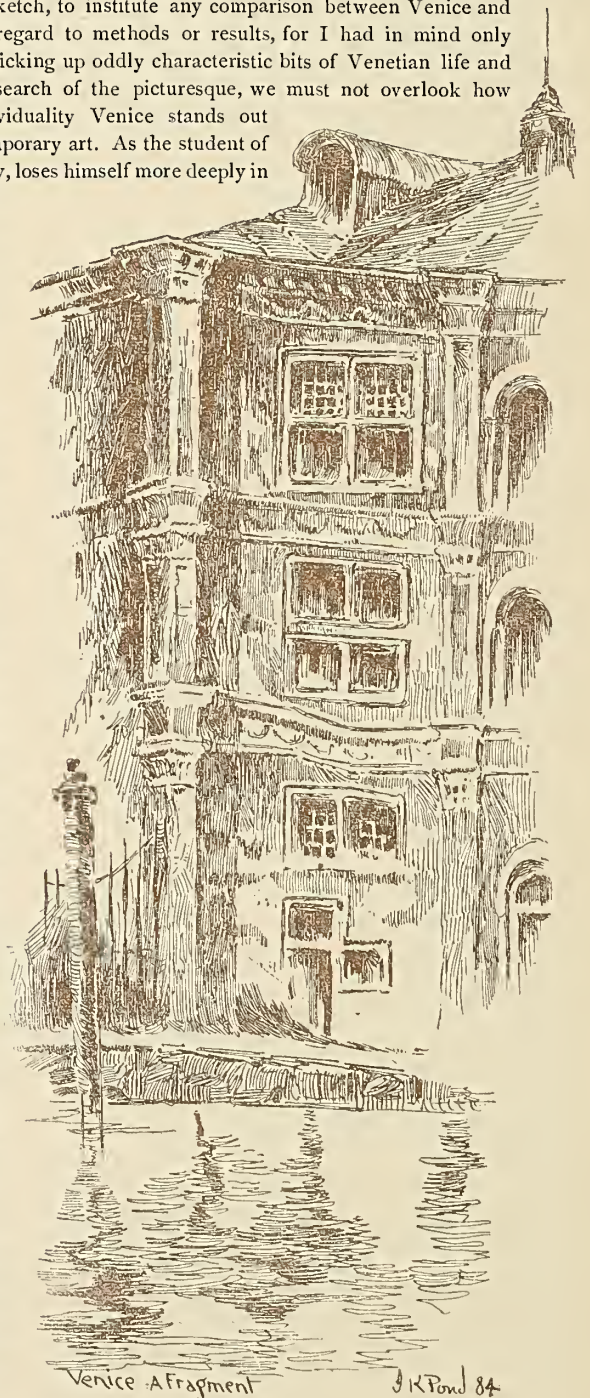
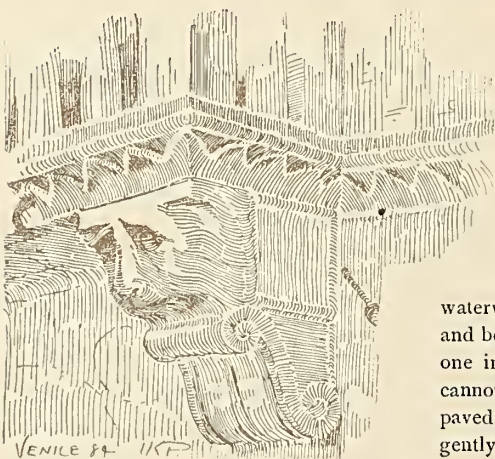
BYWAYS often surpass highways in point of picturesque interest, and in this regard Venetian byways are not at all behind their relatives on shore. Besides the magnificent churches and public and private palaces, which make Venice so noteworthy an object of study and admiration; besides the Grand Canal, whose entrance is grandly guarded, upon the one hand by the oddly-designed domes of *Della Salute* and the broad masses and low lines of the custom house, and upon the other hand by the crowded *Riva* and the royal gardens, back of which rise the royal palaces and, still more conspicuously, the famous Library and the Ducal palace, which are crowned in turn by the shining domes of St. Mark's and the lofty belfry of the Campanile; besides the attractively irregular groups of classic and romantic buildings which touch this Grand Canal every here and there along its entire course, and make a commonplace journey from *Della Salute* to the station, in a freight barge, by sunlight or by moonlight, like a voyage in dreamland; besides all this, the city abounds in picturesque quarters, with narrow, out of the way canals, leading up to secluded gardens or to market-places, where marble façades and bronze statues, on richly-decorated pedestals, look down upon the busy buyers of fruits and breadstuffs, and present an interesting study to the onlooker from abroad, to whom the scene is new, and who is seeking rather to satisfy the mind than the stomach. The outlying islands, too—some of them populous and lively, others of them deserted and dead—all contribute their share to the general attractiveness of the locality. One striking fact will fall with force on the artist who has spent any time and thought whatever in and out among the byways and highways of Venice, and that fact is this: Let him look where he may—about the *Piazza*, along the *Riva* and the *Guidecca*, into the out of the way squares and alleys, on the Grand Canal and into the most obscure waterway; upon the most elaborate palace or the most modest house—everything is intensely Venetian; each part proclaims the individuality and harmony of Venetian thought. No other city of Europe displays in so marked a degree this high artistic quality.

It is not my purpose, in this sketch, to institute any comparison between Venice and the continental cities, either in regard to methods or results, for I had in mind only going out into the byways, and picking up oddly characteristic bits of Venetian life and architecture; but, if we are in search of the picturesque, we must not overlook how grandly in its picturesque individuality Venice stands out against the background of contemporary art. As the student of art, in his wanderings about the city, loses himself more deeply in the twisted waterways and out of the way nooks, more strongly forced upon his mind is that vital quality of this picturesque individuality which so permeates the whole of Venetian art. And

if I do not intend to institute comparisons between Venice and other cities, neither do I intend to attempt a full explanation of the causes which begat this interesting and powerful condition of art in Venice. To the sympathetic student the reasons are very clear, and contain in themselves the key which may unlock the mysteries of all great art. There the position of the individual, working not unto himself alone, is most strongly manifested. There is set forth the complete exposition of the requirements of national art; of power gained by the union of forces; of the power and strength, not only of the ultimate achievement, but the power and inspiration given to each individual. One who is interested in the development of national art cannot do better than to study Venice, for her broad political power, her vast commercial interests, and her peculiar geographical situation, made her, above all other cities, the most advantageous ground for the solution of problems of this nature. Isolated from many of the disturbing and degenerating influences which beset cities of the mainland; alone, and in an out of the way corner of the sea, and yet controlling all the commerce of the seas, Venice was the focal point, toward which was drawn, and around which centered, all the wealth and power and grand ideas of the East, the South, the West. The world of commerce and of ideas was not only at her feet, it was hers. Her artists and architects felt this, and were the stronger, individually and collectively, for the feeling. They realized that Venice held a position in which she was unrivaled; they realized that she had needs that were unique that were felt and appreciated by no other city, and to minister most grandly to these

needs, they went at their work in a spirit of powerful harmony—powerful, because harmonious; harmonious, because governed by a single thought—the love they bore Venice. This is the key to national art.

But Venice is not always overpowering in its suggestion of great questions in art, for it touches the sensibilities of the artist on all sides. Its quiet waterways induce almost to dream-life, and beget a feeling of rest which comes to one in no other city. Even the country cannot match the deep repose of this sea-paved city. The water rises and falls gently and forcibly, but always noiselessly,



in obedience to the action of the tides. The surface is now and then smooth as glass, and now and then broken with little ripples, which send the reflections of the poles and buildings and roofs in quivering confusion way across the broadest of the canals. On clear days, when there is nothing, not even a sound wave to disturb the sleep of the water, the buildings, as if wearied with restraint and enforced quiet, seem to change position as one looks from them to their image in the almost invisible water; seem to be performing a wonderful acrobatic feat of standing upright, or of hanging with foundations upward from the line of air-bubbles, which is like a string of pearls stretched along the water-line. The eye's repose is broken now and then by a flash of sunlight on the water or on the brilliantly-colored sails of some distant fishing boat returning from its early morning catch on the lagoons. A quiver is sent through the ear's repose now and then by the plash of the paddle, or by the quick, clear cry of warning from the gondolier, as he deftly guides his skiff around the sharp corner of a building as he enters or leaves a branch canal.

As all transportation is by gondola, or by boat of some sort, the gondolier is an important factor in Venetian life, and is a being worthy to stand in so unique a position. He is good natured, respectful, and accurate in his aim, as anyone must have noticed who has seen him shooting his long, dark skiff, like an arrow, in and out among the mass of houses and moving boats, and his strong, graceful movement lends much to the picturesqueness of the floating city. The gondolier is not generally of an inquisitive nature, and, if he is critical, he keeps such thoughts to himself, which is lucky for the sketchers of architectural models, for a talkative gondolier, looking over one's shoulder in a spirit of criticism, would not be an agreeable companion. One thing enjoyed by the sketcher in Venice above all other places, is the freedom from interruption in his work and the absence of necessity for restraining his temper, or of making explanations in unknown tongues, or of hearing advice and criticism from scores of loungers and ragged urchins who, from their remarks, must know a great deal about the technicalities of art (in

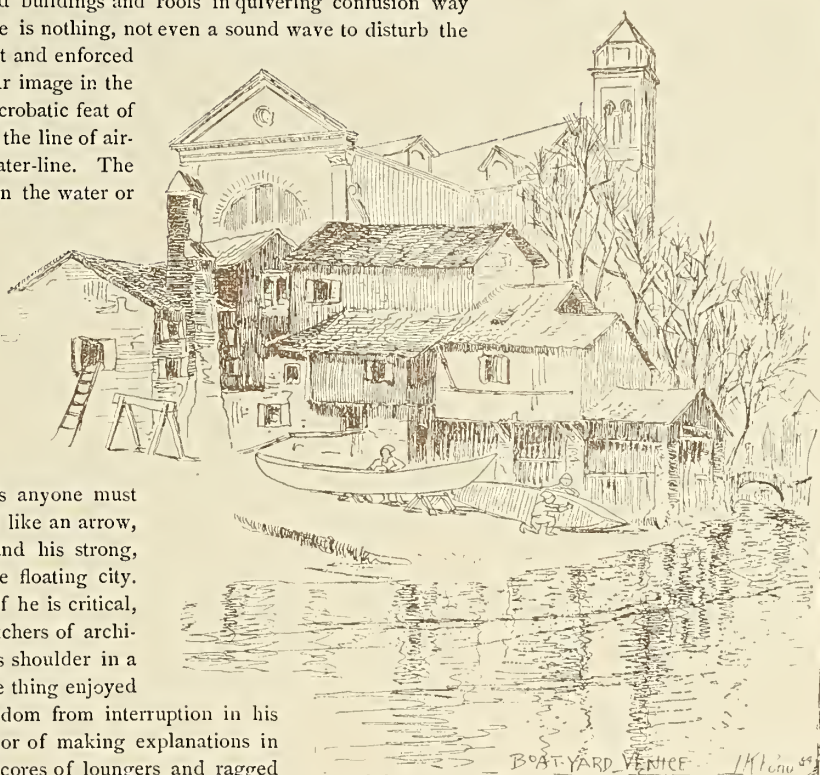
their own minds). But the gondolier is rarely critical, though often appreciative, and contents himself with keeping the boat in place, against the flowing tide, by a gentle, almost unnoticeable movement of the paddle, at various whiles giving interesting bits of gossip, or tradition, or history, relating to the objects in sight. The gondolier, like other Venetians, takes life easily, and if he happens to earn what he considers a day's ration before the noon hour, he does no more work that day, but spends the remaining hours with congenial companions in some dark, out of the way *Trattorie*. Venetian life today is simple to the verge of stupidity. I do not know that it is a crime on the part of humanity to live little lives in these old centers of power and influence, among these monuments of art and cul-

ture, but it is something which puzzles the brain of a philosopher to see what ingenuousness, ignorance, littleness and wickedness can thrive, and right on the battleground of great ideas; and in the south of Europe these battles have been so frequent, and so fiercely contested, that the very flowers which bloom upon these fields should have a rarer fragrance, for the blood which has fertilized the soil. This lack of vital force may be accounted for more easily in Venice than in many other cities, for it may well be that the spell of peace and restfulness, which is thrown about the visitor from away, holds in perpetual bonds the life inhabitant of the city.

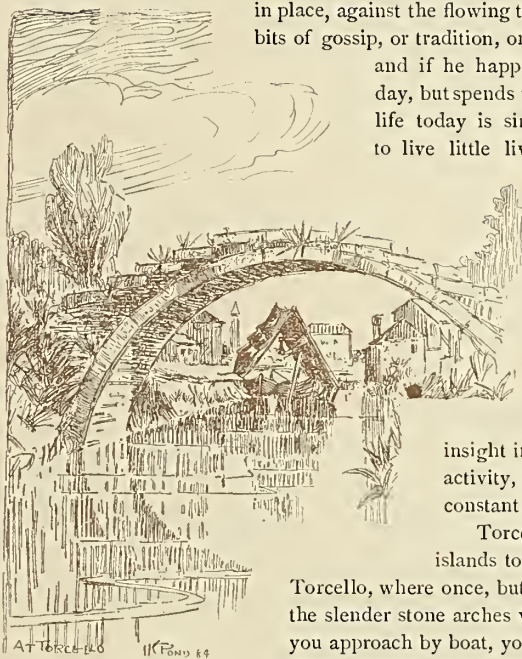
But in spite of the restfulness, Venice gives to the visitor a clear insight into beauty, a deeper inspiration to do, a spirit impelling to potent activity, which seems to fly above the heads and wide of the hearts of the constant dwellers of the place.

Torcello and Murano are perhaps the most interesting of the outlying islands to the searcher after the picturesque. There is almost no life now in Torcello, where once, but very long ago, the eager multitudes used to surge in throngs over the slender stone arches which spanned the canals. At the end of one of these canals, as you approach by boat, you may see, framed by one of these light arches, and its reflection in the still water, a bit of landscape as peaceful in its sleep as is death itself. This bit of

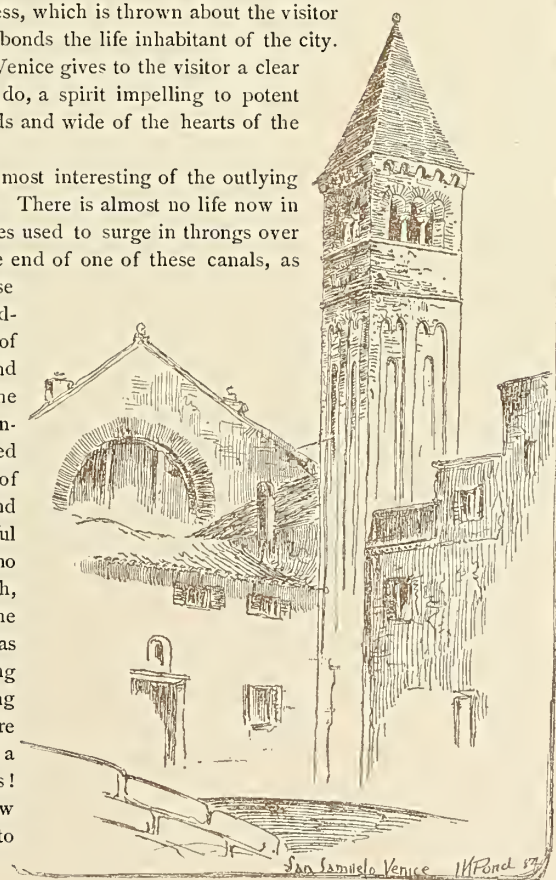
landscape contains everything which now remains of the former glory of the island, and everything of life it now holds—a few low huts near the ruins of former palaces, and the fairly well-preserved remains of three churches of imposing dimensions and curious construction, and over one of these structures more than twelve hundred years have dragged themselves out. I have sometimes questioned if ever, during the twelve hundred years of its existence, the church had been put to better uses than on the day I first saw it; and I have sometimes doubted if ever, in all those years, it had sheltered a more graceful figure, a more beautiful face and form than belonged to a little Italian peasant maiden, who bent over a washtub in the sunshine which fell in a shower of gold into the church's porch, and who hung out the glistening linen on lines stretched from column to column of the ancient arcade. I never quite understood why that scene impressed me as it did, for it was an hour or so before lunch time, and my companions and myself had made an early morning start, and had been sketching busily all the forenoon. It may have been this one sparkling bit of life, amid all those relics of a dead past, touching me as sometimes we are touched by the sight of a rare, frail flower blooming alone on the rocky breast of a cliff; or it may have been the incongruity of the things—clean linen among those islanders! and that will strike anyone who has escaped from the beggars of Murano, who follow your boat as far as they can, as you skirt the shores of their island on your way back to Venice and to rest.



BOAT-YARD VENICE 14 Jan 88



AT TORCELLO 14 Feb 88



San Samuele Venice 14 Feb 88

The Evolution of an American Style.

BY ALLEN B. FOND, ARCHITECT.

A CORRESPONDENT of the *American Architect*, commenting on the designs submitted for the Lick memorial, asks why it is that designers cannot emulate the example of musical composers, taking a theme and developing it harmoniously and never losing sight of the main object. He queries whether it may not be a mistake that each American architect does not carefully consider what his strongest leaning is and keep to some one good style, irrespective of his neighbors. It seems very clear that no man is going to do any really first-class creative work until he does find out what his best hold is and work out an expression of his own individuality in his creations. And it is equally clear that we need never look for unity in the work of a man who had no singleness of conception when he entered upon the formal expression of his idea. That every man should if possible find his dominant motive and develop his designs with singleness of idea, is much more clear than that he should be constrained to seek the expression of that dominant motive through the medium of some *recognized* style, "Classic, Renaissance, Gothic, or whatever it may be." If we attempt to get at the essence of the idea sought to be conveyed by the term "an architectural style," we shall be carried back in our thought to a time when a great number of individuals were striving, each in his own way, to solve a common problem, the conditions of which were set by the age in which they worked and by the climate, customs and uses to be satisfied. Certainly, in the time that elapsed before the work of all these individuals had assumed the common form which came to be called a distinctive style, there was a wide diversity in the conception of the various architects, each of whom may easily have been following his own best light and have been producing works characterized by unity of idea and harmonious subordination of the parts to the pervading theme. The style only came into being when out of this mass of honest and creditable work the exigencies of place, time and purpose had made their natural selection and had stamped with approval a result which was to be credited to no man, but rather to the crystallization into a recognized style of the converging efforts of many single individuals.

Moreover, generally speaking, the *raison d'être* of any particular style vanishes with the change or disappearance of those conditions which in the first place called it into being; and its use under different conditions, in the fulfillment of different purposes, will almost inevitably be arbitrary and unnatural, out of joint with the times and seasons. It may well be that "earth proudly wears the Parthenon as the best gem upon her zone"; but place the Parthenon on an Illinois prairie or in the public square of a Missouri town, and time and place, rhyme and reason, alike cry out at the wretched taste that perpetuates such an anachronism, so incongruous a misappropriation of a thing in itself good and beautiful. The requirements of American life demand of the architect buildings that shall answer new purposes and meet unwonted uses under conditions never before presented to the craft. The conditions of this American life, which alone must ultimately decide upon the forms which shall best meet the new occasion, are themselves unsettled and in process of determination. Today it is impossible for even the most sympathetic mind to gain a clear and unflinching intimation of the subtle harmony which is to be wrought out from the heterogeneous elements of our national life. But enough can be already felt of the spirit and trend of our national feeling, enough is already known of the influences of place and climate and purpose to make it quite certain that none of the existent formulated styles can be reproduced in their entirety on our soil or satisfy, without wide departure from their established forms, the conditions and needs of American life. He who attempts with pedantic exactitude to reproduce in American architecture the feeling and poems of a remote and unrelated Classic or Renaissance or Gothic architecture, clapping their unyielding forms on his building with cast-iron indifference to fitness—if only he may keep his historic style pure—is foredoomed to failure; for failure must result from an attempt to graft roses on to peach trees or make an inflexible round covering fit a cube. Spencer, the realist, and Emerson, the idealist, each affirm that the nature of the inner man determines the outer, visible man of flesh—that the spirit molds the body. And most supremely must this hold true of architecture. The plan, the purpose, the inner soul of the building, determine the exterior, its form and features; and, if the form belies the plan, it is a freak, a monstrosity, and beauty is impossible when there is such a warfare of the members with their uses. I took note recently of a Gothic church with a façade having buttresses at either side and broken up by two buttresses rising the whole height of the gable, and giving to the front what the architect no doubt thought was a pleasing distribution of parts; though the buttresses neither received any thrust, nor sustained any truss, nor carried a tower or spire, nor denoted an interior partition. They were simply clumsy attempts to reproduce a

Gothic façade, and the parts thus ostensibly indicated had no existence in fact. The plan was an unbroken rectangle, the side walls carried the trusses, and the buttresses were excrescences, discordant and unseemly. In a similar way the Romans erected arches to do the work and stuck useless lintels over them, resting on useless columns; and nature has in numerous instances shown her respect for their art (?) by pruning away the excrescences and leaving the arches intact.

The American architect of today who would be something other than a contriver of freaks and misfits, must so plan his building that it shall most perfectly fulfill the requirements imposed by the needs of today. To this plan let him fit its appropriate garment; or better, let him discern the fit and proper form which grows naturally out of his plan. Why build a buttress where there is no thrust? Why break up a wall surface into artificial parts if the presumptive partition is a surface sham and corresponds to no actuality in the arrangement of the plan? Such a method of grasping after beauty is not art, for its very basis is an attempt to deceive; whereas art rests in fidelity to the truth and is the enemy of artifice. How then shall the architect avoid monotony and flatness when his plan necessitates a straight wall? By a proper proportioning and disposal of openings; by a proper treatment of corners and angles; by an artistic handling of the requisite moldings and string courses; by an intelligent use of the roof; and especially, withal, by making the most of the possibilities inherent in his materials. A substitution of fictitious appearances for integral verities cannot be permanent, for time unerring destroys the freak and the abnormal thing; and only the normal creation, that which is in harmony with itself and its environment and which fulfills the law of the type, prevails against the destructive forces of nature and persists.

The American architect who wishes to build a perfect building for what purpose soever must first perfect his plan and make the inner soul of his building conform to the law of its being, adequate to its function and inspired by the life it is to serve. The essential features of this inner soul of the building, once clearly comprehended, will of themselves dictate the fitting garment in which they are to be bodied forth. If the architect seeks to manifest in visible forms this inner soul with fidelity to its function, he will work with singleness of purpose, will be true to his theme through all its variations and enlargements, and, so far as he is successful in his effort, his work will be harmonious in its parts, the consistent expression of an idea—a work of art. The creation may not be Classic; it may not be Gothic; it may not be susceptible of classification in any recognized style; but it is none the less true art, for true art is the consistent embodiment of an ideal that has taken up into itself the essential truth of the real. In the proportion in which the American architect who is thus true to his art sympathizes with and enters into the spirit of the life around him, he is not merely producing works of art as an isolated individual, but is working along one of the converging lines whose meeting shall in due time bring forth the American architectural type or style, provided only there comes to be in the fullness of time a truly distinctive national spirit, the outgrowth of a homogeneous national life.

Two Important Papers.

AT the meeting of the Polytechnic Section of the American Institute, held December 8, L. Duvinage, in a paper of which this is an abstract, said that the increased quantity and quality of work that goes out of the modern machine shop was due to the skillful use of solid emery wheels. He said that a grain of sand from the common grindstone magnified would look like a cobblestone, a fracture of which shows an obtuse angle, whereas a grain of corundum or emery would look like a rhomboid, always breaking with a square or concave fracture. No matter how much it is worn down in use it does not lose its sharpness; hence it is evident that the grindstone rubs or grinds and heats the work brought in contact with, while the corundum or emery wheel, with its sharp, angular grit, cuts like a file or circular saw. There are two general classes of emery wheels in the market; one class of wheels has the grains of emery joined and consolidated by a pitchy material, as rubber, linseed oil, shellac, etc. These must run at a high speed to burn out the cementing material by friction, loosening the worn-out grains, and thus revealing new cutting angles. These are non-porous wheels. Truing up this class of wheels is done with a diamond tool. The other class consists of two kinds, one made by mixing the emery with a mineral cement and water into a paste, which will harden and bind the grains together; the other kind by mixing the emery with a mineral flux or clay, molding into shape and burning in a muffle at a high temperature. These are porous wheels in which the grains of emery are held together by matter having affinity therefor. This class of wheels, unlike the grindstone, has sharp grains of emery bedded together among matter which, in some cases, is as hard and sharp as the emery itself. Such wheels cut very greedily, and do not need to be run at any particular speed. The dresser, made of hardened steel picks, is the proper tool for truing up this class of wheels. Manufacturers in metal goods aiming in reducing the cost of production, would do well to look into the adaptability of the solid emery wheels or rotary file and other labor-saving machinery before deciding on reducing wages of labor.

Col. Richard T. Auchmuty, the founder of the New York trade schools, on First avenue, Sixty-seventh and Sixty-eighth streets, also read a paper. The subject was "An American Apprentice System." After referring to

the decay of the old apprentice system, caused by the subdivision of labor and the inability of the master mechanic to bestow much personal care on the apprentice, it was argued that the only method by which it was possible to train American mechanics who could compete with foreign workmen, was a combination of the trade school with real work. The trade school first to gain skill and to acquire what is now in danger of being forgotten, the knowledge of the science on which a trade is based, then real work to gain speed of execution and skill. To apply, in short, the same system of education to the trades as is now followed in the professions. Col. Auchmuty maintained that this was "no paper plan, devised in a study," but it was the result of the experience gained while instructing over one thousand young men at the New York trade schools, many of whom were now earning three or four dollars per day, and some of whom were master mechanics. Excellent specimens of plumbing work, of wood carving and stonecutting were exhibited, the result of one season's instruction. Attention was also called to a large west side apartment house, the brickwork of which was done almost entirely by trade school graduates. Now that it has been demonstrated that trade schools could teach the American lad how to work, it rested with the master mechanics to give him employment. Two associations, the master plumbers and the silversmiths, had asserted their right to do so, notwithstanding trade union rules to the contrary. The opposition of the journeymen, most of whom were of foreign birth, to allowing boys to learn the trades, was attributable, Col. Auchmuty stated, to their dread of competition and over-production. This was a groundless fear. The labor of young men who had been taught how to work would, if properly utilized, lower the cost of the product without lowering wages. Over-production came from high prices, not from people having too much. The tendency of trade union regulations in regard to production was to enhance prices, contract the market, and make the poor poorer.

Chicago's New Water Tunnel.

MAYOR ROCHE and Commissioner Swift, of Chicago, opened bids on November 16 for the new eight-foot water tunnel. They were as follows: E. Earnshaw, \$823,161; Angus & Robinson, \$1,145,175; A. Onderdonk, \$748,500; McAdams & Amberg, \$1,107,160; Fitz-Simons & Connell, \$887,490; M. P. Garrity, \$800,628. Each bid was accompanied with a certified check for \$50,000. Mr. Onderdonk received the contract.

Commissioner Swift opened bids at the same time for the crib break-water, the bids being as follows: Chicago Dredging and Dock Company, \$129,000; Fitz-Simons & Connell, \$119,000; H. B. Herr, \$119,000. This contract was awarded to Fitz-Simons & Connell, of Chicago.

Some surprise was expressed, says the *Chicago Tribune*, among the unsuccessful bidders that a New York man, who appeared to be unknown to them, should have carried off the contract. The same feeling was expressed to some extent about the city hall on account of the high standing of the Chicago contractors who put in bids. Fitz-Simons & Connell are especially well known. Among their most noteworthy undertakings are the Lincoln Park shore protection, the piling and dredging for Lake and Rush street bridges, and that for the new Dearborn street bridge, and the shore inlet to the North Side Waterworks. Angus & Robinson are substantially the firm of Robinson & Minor, who built the Hyde Park Waterworks tunnel, five thousand feet in length, and the other bidders are well known. The successful bidder is known elsewhere better than here. Andrew Onderdonk is a civil engineer of experience, who has his headquarters at New York City. He has done his most noteworthy work in Canada, California, and British North America, and is well known to the heavy financiers and leading engineers of those parts of the country. One of his biggest undertakings was the building of the western three hundred and fifty miles of the Canadian Pacific from the Rocky Mountains to the Pacific Ocean. There were over forty tunnels on this part of the line, and his work was considered by the best authorities as ranking with the most difficult and scientific ever done on this continent. One of his contracts with the Canadian Pacific amounted to \$9,000,000, and the smaller ones aggregated nearly as much. He built the harbor improvements of San Francisco, including the docks, ferry slips, and stone sea wall in deep water, and is an expert in submarine work. Financially he is entirely responsible, and his past work is a guarantee of his ability to successfully carry the new tunnel to completion.

The tunnel, according to the specifications, is to commence at some point in the Lake Park, to be located by the city engineer, and extend four miles in an easterly direction, the shore end to be made in a southerly or westerly direction, as may be determined by the commissioner of public works. The bottom of the inside surface of the western end of the tunnel shall not be less than eighty feet below city datum, and may have an incline upward of one foot per mile to the eastern terminus. A shaft is provided for in the Lake Park, and another at the extreme east end of the tunnel, with such intermediate working shafts as may be determined upon. The several shafts are to be ten feet in diameter, lined with brick masonry, not less than sixteen inches in diameter. The clear width of the tunnel is to be eight feet, and the clear height eight feet two inches, with the top and bottom arches semicircles. The tunnel is to be lined with brick masonry thirteen inches thick, the bricks being laid longitudinally with the tunnel, the edges toward the center. Mr. Artingstall states that the ground through which the tunnel is to extend is believed to be hard clay, but the contractor must take the work at his own risk and guard himself against quicksand or other danger. It was also provided in the specification that the commissioner of public works may elect to stop the tunnel at two and a half miles from the shore or continue it the full four miles. Should the tunnel only be extended two and a half miles the work must be completed within forty-two months after the contract is signed, and if the tunnel is extended to the four-mile limit, that part of the work must progress at the rate of 1,800 feet per annum from each working face. Bids were also received and considered for an iron tunnel, but in this case full drawings and specifications accompanied the bid. This provision was put in at the request of Engineer Onderdonk, of New York, presuming that this might be the means of cheapening the expense a great many thousand dollars.

A Chicago Theater Ordinance.

COMMISSIONER EDBROOKE, of the Chicago Building Department, has prepared the following theater ordinance, which will be shortly presented to the city council:

It shall be unlawful for any owner, agent, lessee or manager of any theater, opera house, public hall or other place of amusement, within the city of Chicago, having a stage, and with or without scenery, wherein people congregate for amusement, to sell, or give, or to permit or allow any other person or persons to sell or give away for any one performance a greater number of admission tickets than the number allowed by the commissioner of buildings and fire marshal for the regular seating and standing audience of such theater, opera house, hall or other place of amusement.

Ample and commodious aisles, lobbies, foyers, passage-ways and stairways without any obstruction whatever shall be provided under the direction of the commissioner of buildings and fire marshal in all such theaters, opera houses, public halls, or other places of amusement within the city of Chicago, and the space upon each floor, and in each gallery, after due allowance has been made for such aisles, lobbies, foyers, passage-ways and stairways, may be used for permanent seating space, or for seating and standing space together for the audience, and as follows, viz: The whole space so reserved for seating may be seated with permanent and fixed seats or chairs, or a portion of such space, not to exceed in any one case 500 square feet of floor surface, may be left unseated for a standing audience in each theater, opera house, public hall or other place of amusement, or in such proportion as the said commissioner of buildings and fire marshal shall in each particular case, and from time to time determine, allowing in no case a less space for each standing person than five square feet of floor surface.

A suitable and strong open railing shall extend along the lines of each aisle, separating the aisles from such standing space upon each floor and gallery, with such ingress and egress openings through such railing only as shall be allowed by said commissioner of buildings and fire marshal. Such standing space shall in no case be in front of or between any seat or chair and the stage, but must be back of the extreme seats or chairs in each and every case. Every person entering such theater, opera house, public hall or other place of amusement shall hold a regular admission ticket entitling him or her to a seat, chair or standing space, and every such person shall occupy such seat, chair or space assigned to them, and shall not stand in or occupy or in any other way obstruct any aisle, stairway or passage-way in any theater, opera house, public hall or other place of amusement.

It shall be unlawful for any agent, lessee or manager of any theater, opera house, public hall or other place of amusement to sell or give away, or permit or allow any other person or persons to sell or give away admission tickets for any performance, or to open to the public any theater, opera house, public hall or other place of amusement without first obtaining a license from the city collector, and no such license shall be granted by said city collector until such agent, lessee or manager shall first exhibit to said city collector a diagram of such theater, opera house, public hall, or other place of amusement, bearing the certificates and signatures of the commissioner of buildings and fire marshal. Such diagram shall show accurately each floor and gallery, and the number of persons that can be accommodated by seat, chair or standing space on each floor or gallery; the number of aisles, stairways, and exits, and their locations. One or more of such diagrams shall be framed and placed in such locality and in such numbers upon each floor and gallery of each theater, opera house, public hall, or other place of amusement as shall be ordered by said commissioner of buildings and fire marshal. The said commissioner or fire marshal shall have the right to close and keep closed any theater, opera house, public hall, or other place of amusement open to the public or operating without a license from the city collector, until such license has been procured, and in such manner and form as hereinafter prescribed.

The lessee, owner, manager or agent of any theater, opera house, public hall or other place of amusement, either one or each one of them, shall be liable to a fine of \$5 for each and every ticket sold or given away for any one performance, or for each and every person allowed as spectator to enter such theater, opera house, public hall or other place of amusement beyond that number allowed by said commissioner of buildings and fire marshal, and as shown upon the diagrams of each floor and gallery, and a further fine of \$100 for opening such place of amusement without a license, and a still further fine of \$100 in each and every case for allowing or permitting obstruction of whatever kind or nature by persons, camp stools, chairs or otherwise, in any aisle, passage-way, stairway, foyer or lobby upon any floor or gallery, in any box or balcony, during the time such theater, opera house, public hall or other place of amusement is open to the public. The above fines in each case shall be for the first offense, and double the amount of such fines in each case for the second offense and each subsequent offense.

The ordinance seems most acceptable and will in all probability be passed by the city council.

Safety of Foreign Theaters.

RECENT investigations appear to show that in respect to fire precautions, foreign theaters are not much better than our own. This is not saying very much for our own, but it indicates the common failings which make human nature much the same the world over, whatever the language, climate or sky. With only three exceptions, the theaters of Berlin are pronounced wholly unsafe as to fire. One place is named where "a perfect labyrinth of narrow passages and crooked corridors" must be traversed to reach the auditorium, and another with exits so faulty that in ordinary circumstances it takes fully twenty minutes to empty the house. The Berlin press is much excited over these revelations. A London writer proposes to compel the managers of theaters to appear before the curtain in advance of each performance and instruct the assembled audience how to escape in case of fire or alarm of fire. In some American theaters there is printed on the back of the programme a plan of the building, showing all the exits and how to reach them. These would be available, however, chiefly for those occupying the outer rows of seats. Those nearer the center would be apt to suffocate before they could climb over the intervening seats and barriers.

The Status of Foreign Architects.

AMERICAN architects are somewhat given to pessimistic reflections on the low estate of their profession in this country, the indignities, neglect and impositions everywhere encountered, most of which is undeniably true; and they look regretfully across the seas to the supposed honors and emoluments of their brethren in foreign lands. But there is as deep discontent among architects there as here, and for substantially the same reasons, a refusal of the general public to accord to them that high regard, confidence and adequate remuneration which are enjoyed by the other professions. The last volume of proceedings of the *Société Académique d'Architecture*, of Lyons, France, opens with a preface lamenting that "the architectural profession, once held everywhere in honor, now witnesses a daily diminution of that high consideration which is its due. This humiliation results from various causes, and must be checked by the dissemination of a truer and juster public sentiment." This may be accomplished by the union in an architectural society of all honorable practitioners, zealous for the dignity of their profession, true to its principles, determined to prevent ignorance and incapacity from usurping the esteem due to talent, and earnestly cultivating sentiments of fraternity and goodwill.

A Few Axioms About Architects.

AN axiom is a self-evident truth. Valuable and interesting collections of axioms relating to mathematics and other sciences have been made; but those relating to architects seem to have been generally overlooked. We present a few samples, just to show the richness of this field.

Architects who are able to command a good price always get it, like other people.

Architects who work for small pay do so not from pure benevolence, as some pretend, nor from anything else that is pure, save pure inability to get more—i. e., out of the owner.

They often do get more, however, a good deal more, without the owner's knowledge, though it all comes out of his pocket at last.

It always pays in the end to employ first-class talent. As to architects it pays in the beginning as well.

The loudest complaints about architects are from those who employ the cheap kind, and the cheaper the kind the worse the complaint. Those who pay least for their architecture pay the most for what they get.

It is poor economy that begins on the architect who makes your plan. Get a thoroughly good plan to start with and your house will have value even if poorly built; but when you set out with a cheap, ill-designed plan you will never get a decent house from it, no matter how much you may spend—absolutely never! It would be money in your pocket to start with a good plan if it cost ten or twenty per cent, rather than build from a poor plan which you could get for nothing.

There is nothing more stupid than to haggle and dicker with a good architect about his commission. Get the best man and pay his price. It is one of the very smallest items in the cost of a house at most, so trifling that could you save it all you would not be much ahead; and as you must pay something, the possible saving is too insignificant for you to spend your time disputing over it. Then think of the risk you run in imperiling your whole improvement when you buy cheap architecture from a Chatham street representative of the profession.

Corrosion of Lead Roofing.

LEAD is usually considered indestructible by atmospheric influences, whence it has been extensively used abroad for roofing, especially on public buildings. It is now found subject to rapid corrosion under certain circumstances, as when placed in contact with oak sheathing, particularly if unseasoned. This is ascribed to organic acids in the oak, and it is now customary to interpose some covering of wood or paper between it and the lead.

The handsome flèche of the Notre Dame, at Paris, was finished in 1864, under the care of Viollet-Leduc, architect. Its covering and ornaments are of lead. These have become so impaired already by corrosion as to need extensive restorations. The sheathing is of oak, coated with paint. The destruction appears chiefly in places where the lead has been nailed or soldered without proper allowance for expansion and contraction (strange that so eminent an architect as Viollet-Leduc should have overlooked that!), and where the metal is in such close contact with the wood as to leave no room for air to pass between. The corrosion appears on the under surfaces of the lead, where it touches the wood, and is most marked on the south and southeastern exposures, also wherever the lead has been hammered down to fit into moldings. Where the lead is free from the wood and there are apertures for the passage of air out and in, it is uninjured. The lesson seems to be that ventilation is as serviceable to preserve lead construction as wood.

Our Illustrations.

City Hall, Hamilton, Ont.; James Balfour, architect.

Residence for A. B. Dewey, Chicago; William W. Clay, architect.

Bank and office building, Minneapolis, Minn.; L. S. Buffington, architect.

House at Grand Rapids, Mich.; Frank M. Snyder, designer and delineator.

Residence of Mr. Barber, Lake View, Ill.; Gilbert & Taylor, architects, St. Paul, Minn.

Wesleyan male college, Winchester, Ky.; Crapsey & Brown, architects, Cincinnati, Ohio.

Sketch design of residence for George H. Kettelle, Lake View, Ill.; George Beaumont, architect, Chicago; cost \$6,500.

Residence of D. H. Tolman, Chicago; Jenney & Otis, architects; built of Vert Island brownstone; red tile roof, and finished entirely in hardwood; cost, with stable, \$25,000.

Englewood high school, Englewood, Ill.; M. L. Beers, architect, Chicago. Is building of pressed brick, with terra-cotta trimmings and black slate roof; interior is finished throughout in sycamore, and is divided into school rooms, laboratory, science rooms, offices for board of education, etc.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Residence for S. S. Beman, Chicago; S. S. Beman, architect.

Residence of General Ryan, Cincinnati, Ohio; H. E. Siter, architect.

Residence of Wm. R. Linn, 2709 Michigan avenue; Burnham & Root, architects.

Residence of W. E. Hale, Chicago, corner Drexel Boulevard and Forty-sixth street; Burnham & Root, architects.

Residence for Prof. George E. McLean, Minneapolis, Minn.; Joralemon & Ferrin, architects. The house is of native graystone and shingles; color, yellow, with white trimmings; interior finish in colonial; parlor and hall white and gold, library and dining room in natural cherry.

Illinois State Association of Architects.

THE regular monthly meeting of the Illinois State Association of Architects was held in the assembly rooms of the association, Saturday, January 7, 1888, at 1 P.M., President Samuel A. Treat in the chair.

There were present Architects Samuel A. Treat, Robert C. Berlin, C. M. Palmer, O. J. Pierce, Normand S. Patton, L. J. Schaub, George Beaumont, Clarence L. Stiles, Smith M. Randolph, Clinton J. Warren, A. Druiding, Alfred Smith, J. L. Silsbee and W. W. Clay.

Immediately on calling the meeting to order, President Treat announced the association would go into executive session, and the reporters retired while business, presumably of vital interest to the association, occupied the attention of the fourteen architects present until four o'clock.

Upon the reopening of the session, W. W. Clay, on behalf of the committee appointed to report on a definite plan for the establishment of a uniform percentage for residence work, submitted a report in the form of an agreement to be signed by members of the association, in which 7 per cent should be agreed upon as a substitute of the present recognized fee of 5 per cent for residence work. The reasons given in the report were as follows:

WHEREAS, It is a matter of demonstration that the commission of 5 per cent does not, under present conditions, compensate architects for their services in connection with individual dwellings—the growth of popular taste and architectural skill having led to such a number and complexity of drawings; that for these drawings to be properly studied the commission of 3½ per cent does not remunerate the architects for this part of the service; and the increased individuality and complexity having also greatly added to the cost of superintending dwelling houses, 1½ per cent is not an adequate fee for this part of the service; it is true, therefore, that the total fee of 5 per cent is not in connection with this work a sufficient charge.

Mr. Clay supplemented the report by advocating the adoption of the recommendations in it, and said:

W. W. Clay: At some time some precedent must be established for work which is now a dead loss to architects, and they do great quantities of it under the present practice. I think it is honest of purpose, at least it is well founded, and should be tried, and the 7 per cent, in my opinion, will be recognized. It is a proper fee and the service is well worth the money. This agreement is signed by fourteen architects, every one a responsible person. Of course, I do not count myself as among the number, my own making fifteenth signature to it. I hope it will receive more responsible names from those who are present. Of course, I know that everyone feels a kind of uncertainty about it. You don't know how you are going to come out, but I feel so confident about it that I am willing to risk the little business I have in making the attempt to correct this injustice. I don't care to be looked upon as posing for a martyr if I don't succeed, but I do feel determined to make an honorable effort to establish justice.

N. S. Patton: Mr. President, I would ask for information whether this association has adopted any rates?

The President: We have only recommended the adoption of the rate adopted by the American Institute of Architects and the Western Association of Architects, 5 per cent. As one of the committee, I have circulated this paper. There are one or two whom I approached who have not yet decided whether they will sign or not. With them and additional names which we expect to get, I think we will have no difficulty in increasing the number to twenty. I think we will get ten more signatures. I understand the condition on which the signatures were to be obtained was that it should not be considered binding unless twenty reputable architects were secured to the agreement. I think there is no doubt but twenty members will sign.

Mr. Clay: I understand the original proposition was to secure the signatures of fifteen members. I don't know but there are some who would not be satisfied with thirty. I am quite positive twenty signatures will be obtained, and that number it was understood would make the agreement of force.

Mr. Patton: Mr. President, it seems to me that a movement like this, which will be a benefit to every architect in the country, because it is a higher and more adequate price, and with a general level charge it is easier for every architect to get it in his own business. To make this benefit as wide as possible, I do not see why we should not, as a state association, adopt this increase. In adopting it there is nothing compulsory. I therefore move that this association recommend that 7 per cent as a proper commission to be charged in cases of individual houses. In making this motion I would move further that it be laid upon the table until the next meeting, as by that time it can be pretty generally considered. I think it would be wise for this association to back up this step to a proper remuneration for service by its influence.

Mr. Clay: I second the motion.

The President: It is moved that this state association recommend the charge for individual dwellings be placed at 7 per cent. Are you ready for the question? The motion prevailed.

Mr. Clay: Mr. President, I would like to inquire, in adopting this recommendation, how is it to be known if a man who signs this paper is unfaithful to his agreement?

The President: A committee of three is to be appointed, who will have this matter in their charge.

C. L. Stiles: What will be done with a man who violates his agreement?

The President: It is to be hoped that every man who signs this agreement will have self-respect enough to live up to his word. There is no other law that I know of that provides for his punishment.

Mr. Clay: I think it is safe to assume that, when it is understood as well as 5 per cent, there need be no pledge, any more than there is for the 5 per cent, which is a matter of precedent. Of course, any such man will see insofar as he does dishonor his agreement he will in a measure injure himself by doing so, and men are not likely to work their own financial injury when they can help it. I think if the resolution is likely to be disastrous we will find it out by January next. I am of the opinion that the 7 per cent charge will be as fully used in another year as the 5 per cent is now. After some further discussion of the subject, the session was adjourned.

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.—A. J. Bloor, 18 Broadway, New York, secretary.

WESTERN ASSOCIATION OF ARCHITECTS.—Fifth annual convention will be held November 16, 1888, at Chicago. Normand S. Patton, Chicago, secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Second annual convention will be held the first Tuesday in February, 1888, at Cincinnati. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the first Saturday of every month, at 15 East Washington street, Chicago. Annual meeting first Thursday in October, 1888. R. C. Berlin, Chicago, secretary.

WESTERN NEW YORK STATE ASSOCIATION OF ARCHITECTS meets second Tuesdays of October, February and June of each year. Annual meeting in October. Next annual meeting at Buffalo. W. W. Carlin, Buffalo, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at Kansas City on the second Tuesday in January, 1888. Charles E. Illsley, St. Louis, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of February, 1888. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 3, 1888. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Wichita on the third Tuesday of January, 1888. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—Annual meeting second Thursday in October. John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting third Thursday in August, 1888, at Cleveland. F. A. Coburn, Cleveland, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets bi-monthly. Annual meeting third Thursday in February, 1888, at Memphis. T. L. Dismukes, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Houston on the third Tuesday of January, 1888. S. A. J. Preston, Austin, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1888. F. B. Hamilton, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October each year. F. M. Ellis, Omaha, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday, Builders' and Traders' Exchange. W. G. Williamson, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA.

The annual meeting of the Architectural Association of Minnesota was held at St. Paul on January 3. The following officers were elected:

President, E. F. Bassford, of St. Paul; vice-president, W. H. Hayes, of Minneapolis; secretary, F. G. Corser, of Minneapolis; treasurer, E. E. Joralemon, of Minneapolis; board of management, D. W. Millard and C. A. Wallingford, of St. Paul, and G. M. Goodwin and J. W. Kelley, of Minneapolis.

CINCINNATI CHAPTER, ASSOCIATION OF OHIO ARCHITECTS.

Upon the death of James Sims Trowbridge, architect, of Cincinnati, the members of Cincinnati Chapter met, November 30, in the office of W. R. Forbush, inspector of buildings, with an unusually large attendance, and adopted the following resolutions in memory of their deceased colleague, J. Sims Trowbridge:

The architects of Cincinnati desire to express their sincere sorrow for the death of James Sims Trowbridge.

Stricken by the fell destroyer at the early age of twenty-four years, just as he was thoroughly prepared to engage successfully in the struggle for professional preferment, he has, nevertheless, left behind him many enduring monuments of his unusual skill and ability as an architect.

With pleasure we record our testimonial to his worth, not only as an architect, but also as an honorable and worthy competitor and a social, genial, companionable collaborator in the architectural field.

We extend to his parents and family our sincere sympathy in this their time of trouble, and as an evidence of our respect and esteem we will attend his funeral in a body, and spread this testimonial upon our minutes and send a copy to the family of our deceased brother.

E. ANDERSON,
JAS. W. McLAUGHLIN, } Committee.
WALTER R. FORBUSH,
A. C. NAST, Chairman.
THEO. A. RICHTER, JR., Secretary.

In speaking of the deceased, of whom a brief biography appeared in our last issue, a friend who knew him intimately said: "The genial companionship of James Sims Trowbridge so impressed itself on all who knew him, that deep and painful regrets will accompany the sad news of his departure among all his acquaintances. Faithful, honest and true, his ready smile graced all his doings with the sunshine of good fellowship.

No anger or unkindness came from him, no matter what the provocation. An artist by nature, the world was beautiful to him, and the innate perception, which is the germ of a master, has gone out with his promising young life. His parents have the sympathy of more than usual depth from all his friends. Not soon shall we see his like again."

CHICAGO CHAPTER, A. I. A.

The annual election of Chicago Chapter, American Institute of Architects, was held December 15, and Mr. S. V. Shipman was chosen president; John Addison, vice-president; W. W. Clay, treasurer, and W. A. Otis, secretary.

CHICAGO ARCHITECTURAL SKETCH CLUB.

On December 19, John K. Allen, editor of the *Sanitary News*, gave a very interesting paper on "Architecture in the South of Ireland." The paper was illustrated by about sixty views, and occupied an hour and fifteen minutes in its delivery. Mr. Allen handled the subject not only with intelligence and vigor, but his descriptions were vivid and technical, appealing to the architectural knowledge and artistic sensibilities of his audience. The meeting was attended by the members of the club in full force, many being accompanied by ladies. At the close a unanimous vote of thanks was proffered Mr. Allen for the excellent treat of the evening.

The following was announced as the club syllabus for the year commencing December 5, 1887, and closing with the annual meeting November 19, 1888. The blank dates will be filled later:

- Dec. 5. Club Evening.
- Dec. 19. Architecture in the South of Ireland. Lantern Illustrations. Jno. K. Allen.
- Jan. 2. Club Evening.
- Jan. 16. Broad Art Criticism. J. W. Root.
- Jan. 30. Club Evening.
- Feb. 13. Club Evening.
- Feb. 27. Club Evening.
- Mar. 12. Evolution of the Styles. W. L. B. Jenney.
- Mar. 26. Club Evening.
- April 9. Style. L. H. Sullivan.
- April 23. Club Evening.
- May 7. Practical Plumbing. Martin Moylan.
- May 21. Club Evening.
- June 4. Student Days. R. E. Schmidt.
- June 18. Club Evening.
- July 2. Greek Architecture. F. L. Lively.
- July 16. Club Evening.
- July 30. Plaster Modeling. J. H. Carpenter.
- Aug. 13. Club Evening.
- Aug. 27. Club Evening.
- Sept. 10. Club Evening.
- Sept. 24. Vacation Notes. C. A. Kessell.
- Oct. 8. Club Evening.
- Oct. 22. Originality in Design. W. B. Mundie.
- Nov. 5. Business Meeting.
- Nov. 19. Exhibit and Banquet.

The following are the club competitions for the year, the adjudicating committee remaining as before, composed of architects J. W. Root, L. H. Sullivan, W. L. B. Jenney:

- Dec. 19. Park entrance gate.
- Jan. 16. Staircase and hall.
- Feb. 13. A city residence in French Renaissance.
- Mar. 12. A sideboard.
- April 9. A park fountain.
- May 7. Eight-room frame house.
- June 4. Detail of capital of column, 16-inch diam., full size.
- July 2. Furniture design on one sheet.
- July 30. Carved panel, two feet square, full size.
- Aug. 27. Church gable and belfry.
- Sept. 24. Copper bay.
- Oct. 22. House doorway.

An important move was inaugurated at this meeting, which will place the club in surroundings, and it is hoped in membership, first among artistic bodies in the country. This was the passage of a resolution directing the executive committee to engage quarters for the club at the newly completed Art Institute, corner Van Buren street and Michigan avenue. The officers of the club immediately set about putting this project into operation, and a room 50 by 25 feet was secured. This is being divided into smaller rooms, and will be handsomely decorated and furnished. F. L. Linden, a member of the club, will donate a large part of the decoration. Realizing that all these improvements would cost the club quite a sum of money, a subscription paper was started among the members, and a liberal subscription was raised. It is understood that this fund will not fully cover the expenses involved, and no better time than the present could be selected for honorary members and other friends of the club to show their appreciation of the work the club is doing for the advancement of architectural knowledge by contributing to this fund. The arrangement of the rooms, decorations and purchases of furniture, is being rapidly pushed to be ready for the opening of the rooms, January 16. This first meeting in their new quarters will be occupied by a paper on "Broad Art Criticism" by Architect John W. Root, whose interest in the club has been manifested in many ways, the club's request for a paper being always complied with, giving his hearers his best thought and experience. There is no doubt that the meeting of January 16 will be fully attended by the club members and their friends.

CHICAGO REAL ESTATE BOARD.

The Chicago Real Estate Board held its regular monthly meeting January 4, President William D. Kerfoot in the chair.

The following report from the committee to nominate officers for the coming year was submitted by the chairman, E. A. Cummings. The list will no doubt be duly elected at the regular annual meeting, which occurs January 11.

For president, Henry L. Turner; vice-president, George M. Bogue; treasurer, Moses E. Greenebaum; secretary, James H. Van Vliissingen. Executive committee: Willis G. Jackson, D. S. Place, D. R. McAuley, F. C. Gibbs, and C. L. Hammond. Membership committee: Norman T. Gassette, two years; S. M. Parish, B. L. Pease, E. Goodridge, D. W. Erskine, O. G. Garfield, and C. R. Calkins, one year. Reference committee: Josiah L. Lombard, F. R. Chandler and J. W. Farlin. Valuation committee: W. D. Kerfoot and Bryan Lathrop.

The annual banquet of the board will be held at the Grand Pacific some time in February.

CHICAGO BUILDERS' AND TRADERS' EXCHANGE.

The annual meeting of the exchange will occur January 16. The exchange is now the largest in the country, and the membership has steadily increased during the past year.

At a recent meeting of the board of directors, the following members were appointed delegates to the second annual convention of the National Association of Builders, to be held at Cincinnati, February 7, 8 and 9:

Geo. Tapper,	J. G. McCarthy,
Wm. Goldie,	F. Gindele,
Adam Weckler,	Joseph Downey,
Matt Benner,	C. A. Paltzer,
James John,	M. Campbell.

Should any delegate fail to attend the convention, the president will fill such vacancy from the following:

P. B. Wight,	Ed. Kirk, Jr.,
A. W. Murray,	D. V. Purington,
Wm. H. Iliff,	P. S. Hudson,
F. S. Wright,	A. Corcoran,
C. B. Kimbell,	M. W. Powell.

The importance of this and other builders' exchanges is evidenced by their recognition by the United States government, the supervising architect having sent copies of the plans for the new custom house and post-office at Wichita, Kansas, to the leading exchanges of the country, so that builders in the different sections could figure on the work. Several of the leading builders of Illinois have called at the Chicago Builders' and Traders' Exchange rooms and figured upon the work. The bids will be closed January 10.

THE CHICAGO MASONS' AND BUILDERS' ASSOCIATION.

The Masons' and Builders' Association of Chicago held its annual meeting at the Exchange rooms, January 5. The following officers were elected: President, Charles Gindele; vice-president, William H. Iliff; secretary, Ed. Moss; treasurer, E. Earnshaw.

The arbitration committee remains as last year. It is composed of George Tapper, George C. Prussing, Joseph Downey, Chas. Gindele and William O'Brien.

New Publications.

STEAM ENGINE CATECHISM. Part I, fifth edition, by ROBERT GRIMSHAW, M.E., John Wiley & Sons, 15 Astor place, N. Y.

It would be difficult to say too much in commendation of this most excellent treatise on the subject of steam as a motor and the modes of its application. The book is liberally illustrated, and abounds in tables of important data relative to the phenomena of steam and steam-making, strength of materials, and principles of construction; in fact, everything that is necessary to make an expert, practical steam engineer or engine builder. The merit of this admirable treatise of 194 pages is, the author has intentionally avoided technicalities, and clothed the information in the garb of simple English words that cannot fail to reach the comprehension of the humblest reader. The appreciation by the engineering public of this catechism, is shown in the fact that four editions have been exhausted, making the fifth edition necessary, which has been much enhanced in value over the last edition by answers to practical inquiries received since its issue. The present edition is uniform in size with the previous editions. The price of the book, \$1, seems insignificant.

PROCEEDINGS OF THE SOCIETY OF ARCHITECTURE OF LYONS, FRANCE.

The Academical Society of Architecture of Lyons, France, issues its proceedings for the years 1883 to 1886, inclusive, in a handsome volume of nearly two hundred octavo pages. Beside constitution and by-laws, there is a list of twenty-nine publications issued by the society since the year 1846, a record of the annual competitions it has conducted since 1843, the proceedings of its convention, obituary notices of deceased members, accompanied by four excellent steel plate portraits, and several elaborate and scholarly essays, including a paper on concretes, a beautifully illustrated paper of thirty pages, giving an itinéraire of an architect's tour in Spain, and an essay of over one hundred pages on architectural styles. This notes in successive detail Hindoo architecture, the Assyrian, Egyptian, Greek, Etruscan, Roman, Byzantine, Lombardo-Roman, the Ogival (XIII century) and the Renaissance. This volume creates a very favorable impression of the erudition and industry of the members of the Lyons society.

INTERIOR DECORATION. By Arnold N. Brunner and Thomas Tryon. New York: W. T. Comstock.

The desire to decorate the person probably antedates the desire to wear clothes; and therefore we conclude that the desire to decorate the interior of houses preceded the consciousness of the need of houses. However, we are content to leave this question to the scientist who professes the historical method. Be this as it may, the desire to decorate interiors is universal, and a universal desire is not to be cried down, but taken account of and molded, or, at least, directed. Therefore it is that Mr. Gladstone Lippen wrote a "Theory of Taste," in which he used his likeness as a frontispiece; therefore it is that the German philosophers are floundering around the now pathless swamp of aesthetics; and therefore it is that Messrs. Brunner and Tryon issue this volume on "Interior Decoration," and having had clients to practice on, and knowing thus how people are inclined to go, have brought together, in tasteful form, with ample, well-designed and well-executed illustrations, a body of doctrine to lead them into better paths. We have rarely seen a statement of principles more clearly put or more to the point. The freedom necessary to allow scope for individual taste is frankly recognized and encouraged; but stress is laid on the necessity of making individuality accordant with fundamental principles. We are glad to see so outspoken a condemnation of the habit of making a house plan a study in political geography, by having an Italian hall leading to a Louis XIV drawing room, from which we are conducted to an Indian library and an Elizabethan dining room, and then converting the whole into a cheap

imitation of the British Museum by filling every nook and cranny with meaningless and tasteless bric-a-brac. Variety can be obtained without discord and quantity is not an essential in art. The book is full of happy suggestions and, while it will not make of each reader an expert decorator (which may Dame Fortune forbid, for the market for amateurs is already overstocked), it will be of great help to the housebuilder and housekeeper who are desirous of living, not in a curiosity shop or an asylum for cracked crockery, not in a bald and barren tenement, nor in an overdone and dowdy dwelling, but in a tasty and inviting home.

COAL AND COKE. Another splendid Christmas and New Years' Annual for 1888. The latest and best of the Rock Island series.

Thousands who have perused with delighted interest the pages of "Watt-Stephens, the Genius of Steam" (1885), "Votagat, the Genius of Electricity" (1886), and "Petroleum and Natural Gas" (1887), will be pleased to know that the Chicago, Rock Island & Pacific Railway has issued another magnificent souvenir for the Christmas and New Year season of 1888, which surpasses in many respects anything of the kind heretofore published. "Coal and Coke" is the title of the work, and the subject has been exhaustively treated. It is written in a captivating colloquial style, embodying a vast amount of information in regard to coal strata; their relative position in the earth's crust; where deposits occur, their nature and extent; the different processes of underground mining; how coal is converted into coke, and some of its varied and multiple uses. The book is profusely illustrated from original sketches. Although the expense has been very great, the Rock Island has concluded to supply "Coal and Coke" at the nominal rate of 10 cents (for postage) per copy. By addressing E. A. Holbrook, general ticket and passenger agent at Chicago, Illinois, a copy of "Coal and Coke," will be mailed prepaid, to any part of the world.

Personal.

MR. R. M. TURNER, a leading draftsman in Chicago, who recently went to St. Paul, entering into partnership with Architect H. R. P. Hamilton, of that city, has gone to California for his health.

It is a pleasure while congratulating Architect Frank J. Grodavent, of Leavenworth, Kansas, upon his appointment as architect for the new military post near Denver, under Captain L. E. Campbell, assistant quartermaster, U. S. A., to speak of his high character as a gentleman and abilities as an architect, qualities which eminently fit him for this important appointment.

MORRIS G. HOLMES, whose skill as a draftsman has placed his name among those foremost in the craft in Chicago, made an important change in the general design of his life structure, on December 31, by adding a wing. Where before the façade was gloomy a light and airy cheerfulness pervades the new addition. Her name was Maud J. Harvey, and her home was Chicago, Ill. Mr. Holmes is vice-president of the Chicago Architectural Sketch Club.

MR. JOHN K. ALLEN, so long known in connection with the *Sanitary News* as reporter, associate and managing editor, is now editor of that excellent journal. Mr. Allen's friends among sanitarians and architects, and he has friends wherever he is known, will be glad to hear of his promotion, and give him every assistance to make his paper, if this be possible, even better than it now is. Mr. Allen has just been elected third vice-president of the Chicago Press Club.

Mosaics.

IN regard to Rosenberg's finishes, E. H. Jensen, representing the United States Treasury Department, has written a letter recommending their use by the department. He says he found "Rosenberg's Elastica Finishes" to be "as represented in every respect," and "very superior in finish to those we are now using."

ARCHITECT E. L. Roberts, of New York, has designed a residence for William Rockefeller, president of the Standard Oil Company, which is being erected on the Hudson river, near New York. The style is old English, the material greystone and the ground plan about 50 by 150 feet. It will be thoroughly fireproof and, exclusive of the decorative work, will cost \$250,000.

THE Standard Solid Leather Nail Company, of New York, have removed to 41 and 43 Center street, and have changed their firm title to The Standard Leather Nail Company. The firm have also made arrangements with Mr. Pianko for the manufacture and sale of leather gimps and edgings for use in the furniture and upholstery trades, under the name of Pianko's Standard Leather Gimp and Trimming Company, and will fill all orders for this class of goods.

SEVERAL features have been brought out by Merchant & Co. in the last few years; namely, guaranteeing, stamping and discontinuing importation of imperfect or waster sheets; but their last feature of stamping every box with the actual net weight of the 112 sheets in that box is of far greater importance than any move made by them in the past. This new feature cannot fail to be of importance to all architects and consumers, or with anyone wanting to secure the best plates in the market, and at the same time feel satisfied that they are getting just what they want.

LOCKWOOD & KIMBELL, the agents for St. Louis press brick and the different varieties of eastern pressed brick, have secured the services of William Edgar, so well known to the Chicago building public as the former secretary of the city building department. Mr. Edgar has an extensive acquaintance among the architects, with whom he is quite popular. Mr. Lockwood being asked, a few days since, regarding the state of trade, that gentleman pointed to the following telegram he had just written:

St. Louis Hydraulic-Press Brick Co., St. Louis, Mo.:

Begin immediately on shipment of one hundred carloads of pressed brick. Will write more fully.

LOCKWOOD & KIMBELL.

This represents about 800,000 brick, and the largest order for brick ever sent from Chicago. In anticipation of the coming season's demand,

it is the intention of Lockwood & Kimbell to keep, at least, 1,000,000 pressed brick on hand to supply the Chicago market, as well as a large stock of molded brick, so that the trade will be promptly supplied to any quantity that is desired.

COMPARISONS may be odious, but when a firm has the enterprise and taste to produce something that is by common consent acknowledged to be superior it should receive credit for so doing. This is true in regard to the calendar issued for 1888 by the Smith & Anthony Stove Company, of Boston. It is artistic enough to find a place on the desk of any architect, and if the inference is drawn that a firm that has the taste to get out such a calendar must have a corresponding taste in designing its stoves, ranges and furnaces, they will deserve a reputation for producing goods in which art as well as utility is combined.

THE massive reflecting chandelier of special design which hangs from the center of the audience room of the West Harlem Methodist Episcopal Church, New York, and which is one of the main ornaments of the church, was built by I. P. Frink, of that city. It measures eighteen feet four inches from brass ball at end of stem to the plate at the upper extremity of the stem, and weighs 600 pounds. It contains 130 lights. The gas burners are made to resemble candles. The lower circle contains eighty gas burners; it is surmounted by a silvered-glass reflector. Above this circle and the reflector are ten clusters of lights, each made up of seven gas burners. The gas will be lighted by electricity. The chandelier brilliantly illuminates the audience room, and is richly ornamented in polished brass and old gold.

Railroad Notes.

TO DENVER IN ONE NIGHT.—On December 4, 1887, the Burlington route, C. B. & Q. R. R., inaugurated a fast train service, as follows: Fast express train, known as "The Burlington's Number One," leaves Union depot, corner Canal and Adams streets, Chicago, at 12:01 P.M. daily, and runs to Denver solid, arriving at 10 P.M. the next day, thus making the run from Chicago to Denver in thirty-four hours. This train arrives at Omaha at 5 A.M., making the run to Omaha in seventeen hours. Corresponding fast train from Denver to Chicago. Direct connection made to and from St. Louis with these trains, and at Denver with the fast train of the D. & R. G. R. R. for San Francisco and Pacific coast points. Superb equipment on "The Burlington's Number One," consisting of sleeping cars and coaches from Chicago to Omaha and Chicago to Denver without change. Meals served en route on the famous Burlington route dining cars as far west as the Missouri river. Omaha passengers will be allowed to remain in their sleeping cars until breakfast time. See that your ticket reads via the C. B. & Q. R. R. It can be obtained of any coupon ticket agent of its own or connecting lines, or by addressing PAUL MORTON, General Passenger and Ticket Agent.

FAST TRAINS TO Omaha, Denver, San Francisco and the Pacific coast. Local trains to Kansas City and St. Joseph, Mo. Sunday, December 18, the Chicago, Milwaukee & St. Paul railway commenced running a fast train, with through sleeping cars, from Chicago, at 7:30 P.M. daily, arriving at Council Bluffs at 11:30 A. M. next day, making connection with the "Overland Flyer" of the Union Pacific railway for Denver, Salt Lake City, San Francisco, and all points on the Pacific coast. This train also has a through sleeping car for Sioux City, arriving at that point at noon. A second train, with through sleeping cars, leaves Chicago at 10:40 P.M. daily, arriving at Council Bluffs next day at 7 P.M., making connection with the Union Pacific railway for points west of the Missouri river. This train also makes connection at Marion, Iowa, with a local daylight train for Ottumwa, Chillicothe, Excelsior Springs, St. Joseph and Kansas City. A third train leaves Chicago daily, except Sunday, at 11:30 A.M. for Cedar Rapids and intermediate points. This train has through coaches for Council Bluffs, which are attached to the fast train at Marion, Iowa, and passengers are thus enabled to arrive at the Missouri river at 11:30 A.M. All trains depart from and arrive at the Union Passenger Station, corner of Canal and Adams streets. City ticket offices, No. 63 Clark street, Grand Pacific Hotel and Palmer House.

THE two new Pullman palace sleeping cars, "Paulina" and "Fernando," which have been specially constructed by the Pullman Company and placed upon the new route between Detroit and Chicago, are composed of drawing-room, smoking-room and buffet, and have ten regular sections. They are finished in rare mahogany, the most beautiful wood ever worked. The upholstery of the body of the cars is pale blue "glace" plush, while the drawing-rooms are finished in satinwood, and the upholstery done in terra-cotta red plush. The carpets are the richest Wilton make, wrought in attractive designs, and the general effect of the decoration and finishing is not only highly luxurious, but pleasing to the most refined and fastidious taste. These cars will run on the new route between Chicago and Detroit, lately established by the Chicago & Grand Trunk railway. They leave Chicago at 8:15 P.M., arriving at Detroit at 8 A.M. Returning leave Detroit at 8 P.M., reaching Chicago at 8:10 A.M. Breakfast served in Chicago & Grand Trunk dining-car before reaching Chicago. As noticed above, these cars contain buffet service, and patrons therein are enabled to avail themselves of the enjoyment of a dainty and attractive lunch at any hour desired, in addition to the dining-car service. This being the only line of Pullman cars between Chicago and Detroit, is sure to be immediately popular with the general public. Passengers seeking the most comfort for their money are sure to be well satisfied.

ALLEZ-VOUS A LA NOUVELLE ORLÉANS DANS LA FLORIDE OU LA CALIFORNIE?—Où, eh bien! vous pouvez prendre la ROUTE MONON par Louisville ou Cincinnati, visiter la cave Mammoth, Nashville, Blount Springs, Birmingham, Montgomery, Mobile, la côte du Golfe, pour la même somme d'argent que vous dépenseriez pour traverser les marais tristes et déserts du Mississippi ou du Missouri; nous sommes sûrs que vous ne pouvez pas choisir une ligne qui vous offre la moitié des avantages que ceux que vous

trouverez sur la Route Monon et ses embranchements dans le Sud. Personne ne peut aller dans le Sud sans visiter la Cave Mammoth, la grande merveille de ce continent. Elle surpasse toute description; les cavernes doivent être explorées, l'on doit pénétrer au milieu de leur obscurité, admirer les beautés qui y sont contenues, afin d'en avoir une appréciation ou une réalisation C'est la plus grande curiosité naturelle—sans même en excepter Niagara. De Mobile à la Nouvelle Orléans (141 milles) le voyage le long de la côte du Golfe vaut à lui seul l'argent dépensé. Vous avez le Golfe en pleine vue tout le long du chemin, vous passez par Ocean Springs, Mississippi City, Pass Christian, Bay St. Louis et Beauvoir, où demeure Jeff. Davis; ou bien par la ligne de Chattanooga et Atlanta; vous traversez en route les vieux champs de bataille. Lorsque vous décidez à aller dans le Sud, mettezvous bien dans l'esprit qu'il est préférable de voyager sur une ligne qui passe dans la meilleure contrée et vous offre les meilleures places où s'arrêter. Cette ligne, d'une manière positive, c'est la ligne Monon qui fait connection avec les chemins de fer Louisville et Nashville, et Cincinnati, qui a des Dortoirs Palais Pullman, et doublé trains chaque jour. C'est la plus avantageuse pour Cincinnati, Louisville, la Nouvelle Orléans ou la Florida. Pour plus de renseignements, pamphlets et livres descriptifs, adressez vous à E. O. McCormick, Agent Général des Passagers, 183 Dearborn street, Chicago.

Building Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, ILL., January 2, 1888. }

The American people ought to be satisfied with what they have accomplished during 1887, but they are hard to please. There has been progress and improvement in every department of activity. We have built more houses, more lines of railroad, more shop capacity, more machinery, built more towns, spent more money on city improvements, built more miles of electric road, more miles of wire, organized a greater number of commercial and manufacturing companies, and have done more of everything than we ever did in any one year before, and that too, with less loss. The question today is, what will 1888 bring? Builders in all of the larger cities are making preparations for great activity. The impression prevails, and it is not merely an impression but a conviction, that the conditions of the country will permit as heavy investment in building operations during the coming year as during the past. In all the statistics that have been published from month to month, and in all the returns from railroad, manufacturing, lumber and mining companies there is not any evidence furnished that we are nearing the end of the present industrial era. What are the actual trade conditions? There is an abundance of money, crops have been large, prices for breadstuffs and provisions are remunerative, the manufacturing industries are all prosperous, railroad building has reached the highest point of any year in our history, in several lines there is an upward tendency in values, in only a few of them there is a downward tendency, manufacturing capacity all over the country is sold up, an immense amount of work is projected in the way of elevators, warehouses, lake craft building, railroad bridge building, manufacture and shop building and in many other directions. Even in the political field there is less to be apprehensive of than at first sight seems apparent. The speculative tendencies which were at work a few months ago have been eradicated. Land and real estate values are improving slowly. Prominent building authorities here and elsewhere give it as their opinion that there will be more house building during the coming twelve months, taking the entire country into consideration, than during the past twelve months. There will be this difference, however, that much of the building for the coming twelve months will be done in the smaller cities and towns instead of as heretofore in the larger cities. Excellent building authorities further state that a great deal of office building will be done in cities, that railroad terminal and transit facilities will be greatly improved, that a large amount of warehouse building will be done along the lakes and along the lines of the trunk lines between New York and the extreme Northwest. The direction of enterprise is toward the far Northwest, where extraordinary opportunities await the touch of capital and enterprise. Throughout the Ohio Valley a great deal of house and shop building is projected. In the southern states machine shop and mill building and furnace building will be done on a very large scale. The development in those states will be in the direction of the utilization of cotton, coal and timber, and the consequent demand for machinery of all kinds and appliances is already felt at the larger machinery establishments of the North and East. The leading architects in the larger cities between Boston and Chicago entertain no doubts as to the character of activity in their direction for the coming twelve months. There is a growing demand for finer residences within easy distances of our larger cities and towns. There is, they say, a growing tendency by the wealthier classes to live outside rather than inside city limits, and they have in hundreds of cases already received instructions to prepare plans for work to be entered upon next year. There is another tendency that architects speak of, namely, the tendency of employers in many branches of industry to erect tenements for the use of workmen, not only for those who are in their employ, but for others who may seek to buy or rent. There is a general movement in this country in the direction of providing abundant and comfortable homes for workingmen. The demand for enterprise and capital in this direction is almost unlimited. This tendency is being stimulated by the influence of building and loan associations.

Synopsis of Building News.

Ashland, Kan.—The new Clark County Court House has been contracted at \$30,000.

Auburn, Ill.—Architect Geo. H. Helmle, of Springfield, has prepared plans for the school trustees for a two-story brick and stone school building, 23 by 34 feet, steam heat; cost \$15,000; plans completed; contracts not let.

Beatrice, Neb.—Architects Mendelssohn & Lawrie; For Senator Paddock, opera house and hotel building, 125 by 140 feet; cost \$100,000. Episcopal Church building, stone; cost \$40,000.

Caro, Mich.—Contract for the \$15,000 school building has been awarded to J. Glanfield & Sons of Vassar.

Cincinnati.—Reported by Mr. Lawrence Mendenhall. There is a story current of a boy that caught a chicken, and immediately opened its mouth to see if it had teeth. It also relates that he was unable to find any. This is the exact state of affairs in the gleaning for architectural notes. All of the craft are exceedingly hopeful of a busy season, and many are already beginning to submit sketches, but which are secreted from the gaze of the immortal news gleaner. But "such as I have give I unto thee." The only thing to mar the festivities of this happy holiday season, is the thought that one of our number, greatly beloved and respected, has been called to lay down his rule, compass, and text book, and submit himself to the plans of the Almighty. James

Sims Trowbridge's obituary has appeared in the columns of this journal before, and I can add nothing more, except to say that words cannot express the esteem in which he was held, or the enthusiasm which he imparted, especially to the younger architects and draftsmen of Cincinnati.

Architect James W. McLaughlin is busily engaged upon the working drawings for the new Unitarian Church in Avondale. This was a paid competition job, and in the persons of H. E. Siter, Wm. Martin Aiken, and A. O. Elzner he found worthy, painstaking competitors. The church is to be irregular in shape, built of roughstone with custome trimmings, and tile roof. The campanile is very ornamental, and like the preacher's sermon, causes your thoughts to soar upward. The main audience room has a seating capacity of 425 and additional accommodations in the gallery and the adjoining school room. The seating and floor are theatrical in arrangement, while the ceiling is beautifully paneled. The edifice will be heated with steam; cost \$25,000.

Architects Buddemeyer, Plympton & Trowbridge report that several large contracts, in the shape of plans have been secured by them, but are in a state at present that does not permit reporting. This is likewise the state in which architects Elzner, Drach, Anderson and others find themselves.

The improvements at Addystone are going along nicely under Mr. Rapp's supervision. The drawings prepared by Mr. John Boll and others in Mr. Rapp's office are remarkably clear and well executed.

In addition to other work, to be reported later on, Emil G. Rueckert reports an eighteen-room addition to J. H. Ahlbrandt's restaurant, adjoining Music Hall. This will be four and a half stories high and contain a large dining hall; cost \$7,000.

Architects Samuel Hannaford & Sons have their time well employed on the plans below mentioned: Residence (frame) two and a half stories, for P. J. Cadwallader, containing ten rooms and attic. The roof will be of slate. For H. & G. Feder, a store building, eight stories high, with iron front and tin roof. Size 42 by 90. For Isaac J. Miller, Esq., a neat two-story brick of eight rooms, with tin roof. For the Alabama & Great Southern R. R. Depot at Chattanooga, Tenn. Size 52 by 205.

Chicago.—The report of the building superintendent for 1887 shows a larger number of buildings were erected than during any previous year, at a less cost than the average of former years. Many large projects were abandoned on account of the strikes and lockout during the spring, but the heavy decrease looked for during the early season was nearly made up by the exceedingly large number of small buildings erected, the total expenditure reaching \$19,987,900, against a total of \$21,324,400 in 1886. The following tables will show the figures in a condensed form for the different divisions of the city, the grand totals and a comparison of the past six years:

	FEET.	COST.
1887. South Side—1,277 buildings	30,613	\$7,251,400
" North Side— 541 "	14,347	3,400,300
" West Side—3,015 "	70,546	9,126,400
Number of buildings constructed		4,833
" basements and additions		655
" feet frontage		115,506
" sheds and barns		2,098
Cost		\$19,987,900

	FEET.	COST.
1882. Number of buildings	3,113	\$15,842,000
1883. " "	4,086	17,500,000
1884. " "	4,169	20,689,600
1885. " "	4,638	19,624,100
1886. " "	4,664	21,324,400
1887. " "	4,833	19,987,900

Architects Treat & Foltz: For J. G. Garibaldi, brick store and flat building, 32 by 37 feet; cost \$8,500.

Architect C. H. McAfee: For McGinnis & Boyle, three-story brick stable, 65 by 85 feet; cost \$8,000.

Architect A. F. Boos: For himself, three-story flats, 42 by 64 feet; cost \$8,000. For P. Schirra, three-story stores and flats, 24 by 70 feet; cost \$12,000. For J. Becker, three-story flats, 41 by 49 feet; cost \$7,000.

Architects Ostling Bros.: For Oscar Anderson, four-story flat building, 28 by 116 feet; cost \$34,000.

Architect J. H. Carpenter: For Wm. D. Gleason, three-story brick, brownstone and terra-cotta residence, to cost \$18,000.

Architect H. R. Wilson: For W. H. Thomas & Son, five three-story dwellings, 100 by 72 feet; cost \$40,000. Thomas & Son contractors.

Architect H. B. Seelye: For L. W. Pearce, four-story store and flat building, pressed brick and stone; cost \$40,000. For F. P. Owings, six-story warehouse, 100 by 100 feet, brick and stone; cost \$70,000.

Architect J. J. Donnellan: For Father Carten, three-story and basement brick school building; cost \$40,000.

Detroit, Mich.—Architects Mason & Rice, report: For Preston M. E. Church Society, two-story brick and stone church building, 62 by 44 feet, slate roof; cost \$16,000; Richard Helson, contractor. For Mrs. Maynahan, two-story brick and stone dwelling, 30 by 40 feet, slate roof; cost \$2,600; C. Bresnahan, builder.

Architects Donaldson & Meier: For Detroit Sheet Metal Works, three-story brick factory, 38 by 50 feet; cost \$3,000; A. Albrecht, builder.

Architects Scott & Co. report: For Marie E. Hoffman, three-story brick factory, 45 by 90 feet; cost \$4,600; Henry Carew, builder. For J. M. Nicol, three-story brick and stone dwelling, 40 by 68 feet, slate roof; cost \$9,000; McGrath & Wallich, builders.

Architect A. C. Varney, reports: For Mrs. Goring, three-story brick and stone dwelling, 25 by 72 feet, slate roof; cost \$6,000; Jos. Deitz, builder.

Architect G. W. Lloyd, reports: For Mrs. C. W. Whitbeck, five-story brick and stone factory, 58 by 100 feet; cost \$22,000; A. Chapoton, builder. For St. Aloysius

Church Society, three-story school building, 40 by 100 feet; cost \$12,000; A. Chapoton, builder.

D. Lane is building a two-story factory building, 56 by 90 feet, for J. E. & G. H. Scripps; cost \$5,000.

J. C. Wallich has the contract for a three-story school building, 86 by 95 feet, for the board of education, slate roof; cost \$40,000.

John J. Martin is building a brick and stone church building, 65 by 65 feet, slate roof; cost \$4,000; For All Saints M. E. mission.

Geo. H. Clark is erecting three two-story brick and stone stores, 60 by 56 feet; cost \$6,200.

During the month of December permits were issued for 131 new buildings, to cost \$219,880, and fourteen alterations, to cost \$8,140. Total \$228,020.

East Liberty, Pa.—Architect L. O. Dause, of Pittsburgh: For Calvary Protestant Episcopal Society, church building; cost \$60,000.

St. Wayne, Ind.—Architects Wing & Mahurin are preparing plans for an institute for the feeble minded; cost \$40,000.

Fort Smith, Ark.—Architects Lee & Roth, report: Building operations continue fairly active; weather fine; outlook for next season good. The Methodists are talking of a college building. The board of education will erect a new eight-room school building. The government postoffice building is well started. The Fort Smith Stone & Quarry Co., capital stock \$15,000, have filed articles of incorporation with the secretary of state. The officers are C. H. Lee, president; M. Z. Roth, secretary; Gust. Boehley, superintendent.

Houghton, Mich.—Contract for the erection of the mining school building has been awarded Wahlman & Grip, of Ishpeming, for \$63,500.

Indianapolis, Ind.—Architects Bohlen & Son: For Parrott & Taggart, two-story brick building, 70 by 140 feet; cost \$20,000. For F. Mayer, two-story brick and stone residence; cost \$20,000. For German Reformed Society, brick and terra-cotta church building, 70 by 100 feet; cost \$15,000.

Little Rock, Ark.—Architects Orlopp & Kusener: For O. C. Brack, two-story frame residence, 42 by 28 feet; cost \$2,400. Hedgpath & Covington, contractors: For Thomas Cotton Press Co., brick factory building, 50 by 250 feet; cost \$5,700. Hedgpath & Covington, contractors.

Architect F. J. Rickon will rebuild for Wm. Mitchell, *The Arkansas Democrat* building, part three-stories and part two-stories; estimated cost \$6,000.

Architect B. J. Bartlett: For R. W. Dawson, two-story brick hotel building; cost \$5,000. Grant & Sherman, contractors.

Madison, Wis.—Architect John Nader has completed plans for a brick and stone Catholic church building, to be erected in the spring, at a cost of \$12,000. Also, has plans for the St. Antonius Hospital building, to cost \$25,000.

Mayfield, Ky.—The court house at this place has been destroyed by fire; loss about \$50,000.

McComb, Ohio.—Architect V. Wyss, of Findlay, is preparing plans for a schoolhouse, to cost \$30,000, to be built at this place.

Milford, Neb.—John Layne, of Lincoln, has been awarded the contract for the Industrial Home building, at \$14,990.

Milwaukee, Wis.—Architects H. P. Schnitzky & Co. have prepared plans for a brick veneered church building, 51 by 71 feet, cost \$17,000, for the Second Congregation of German Methodists. For Board of Education, school building; to cost \$8,000.

Omaha, Neb.—Architects Mendelssohn & Lawrie. For Methodist Society, stone church building, 112 by 114 feet; cost \$100,000. For Knights of Pythias, five-story brick and stone hall building, 66 by 132 feet; cost \$150,000. For Transfer Hotel Co., four-story addition, 70 by 114 feet, to hotel building; cost \$40,000. For Omaha National Bank, two-story brick addition; cost \$40,000. For A. Schwartzlander, two-story frame residence; cost \$7,000. For Max Meyer, two-story brick and stone residence; cost \$17,000. For L. Mendelssohn, five two-story, brick residences; cost \$32,000. For E. L. Stone, stone residence; cost \$20,000. For Chas. Turner, brick and stone residence; cost \$18,000. For A. Cohn, four-story store and flat building, 66 by 66 feet; cost \$25,000. Also four-story brick and stone stores and flats, 66 by 120 feet; cost \$33,000. For Geo. W. Smith, five-story brick and stone store and flat building, 22 by 132 feet; cost \$75,000. For G. C. Moses, five-story brick and stone store building, 78 by 132 feet; cost \$48,000.

Paris, Ind.—Architect J. W. Geddis of Vincennes has prepared plans for a jail building, to be erected here.

Springfield, Ill.—Architect Geo. H. Helmle, reports: Building season closed, outlook fair. For James L. Powell, two-story frame dwelling, 34 by 50 feet, stained glass, furnace heat; cost \$4,500; under way, J. L. Powell, builder. For Robert Young, two-story frame dwelling, 30 by 48 feet; cost \$4,500; I. C. Whipple, builder. For Henry Iverson, one-story frame cottage, 30 by 48 feet; cost \$1,500; J. Council, builder. For C. B. Merriman, two-story cottage, 30 by 50 feet; cost \$2,500; projected; drawings completed. For W. H. Van Patten, two-story cottage, 32 by 50 feet, wood mantels, furnace heat, stained glass; cost \$3,200; projected; drawings completed.

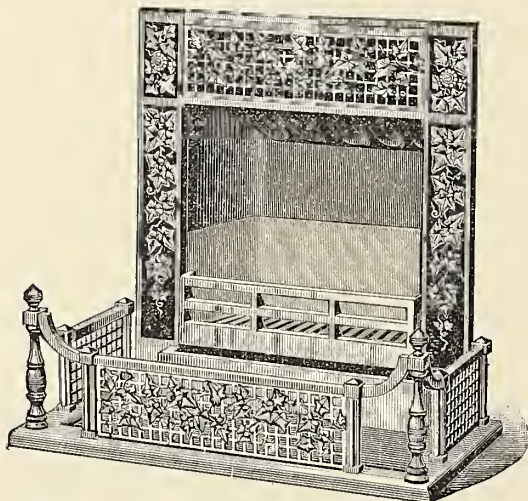
Toronto, Ont.—Architect Chas. A. Walton has prepared plans for a stone and brick school building for this city.

Architects Smith & Gemmel have prepared plans for a school building to be erected in this city.

Wakeeney, Kan.—George Barrett has been awarded the contract for the Frego County Court House, at \$26,994.

Warren, Minn.—The Warren Manufacturing Co's elevator has been destroyed by fire, loss \$25,000.

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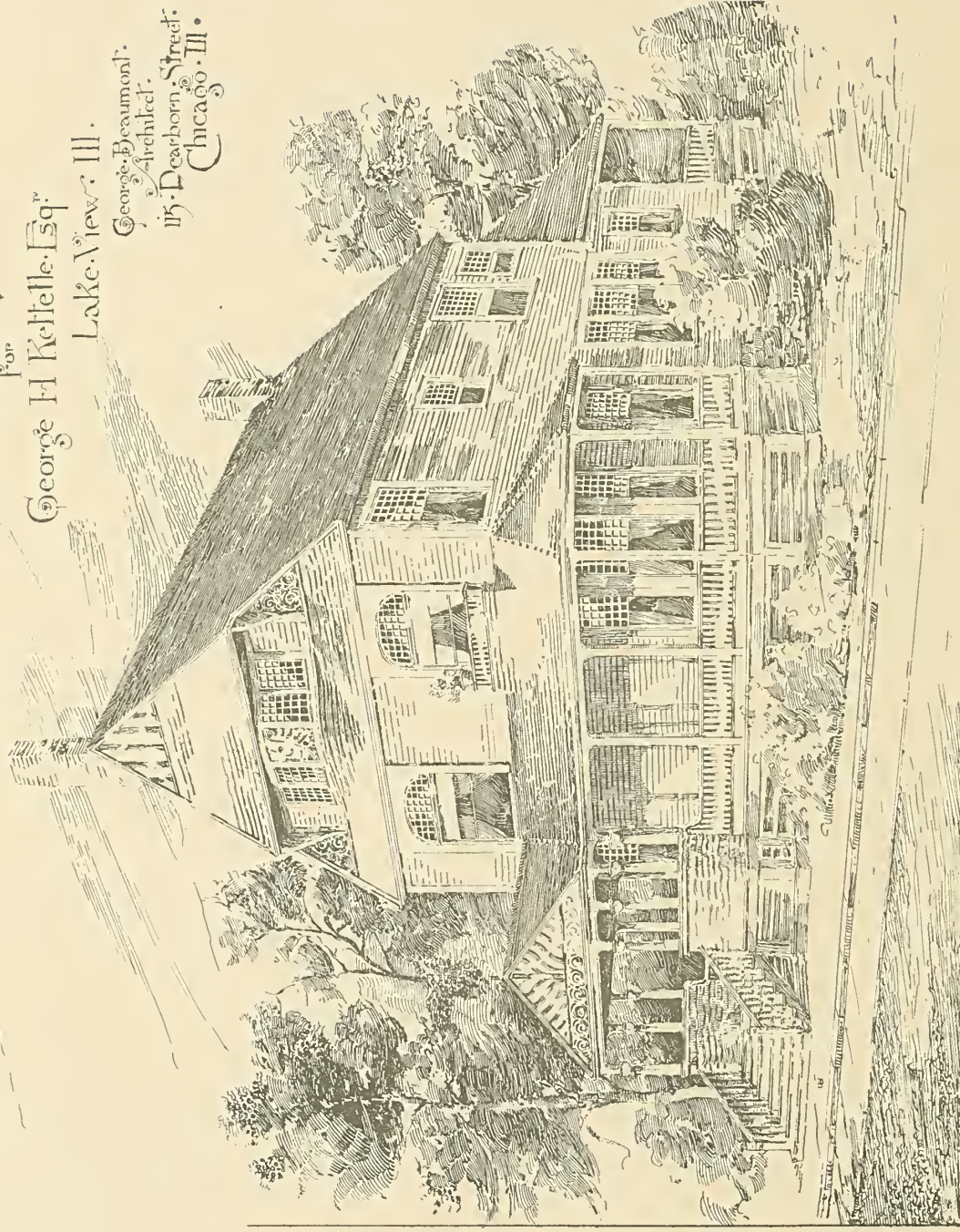
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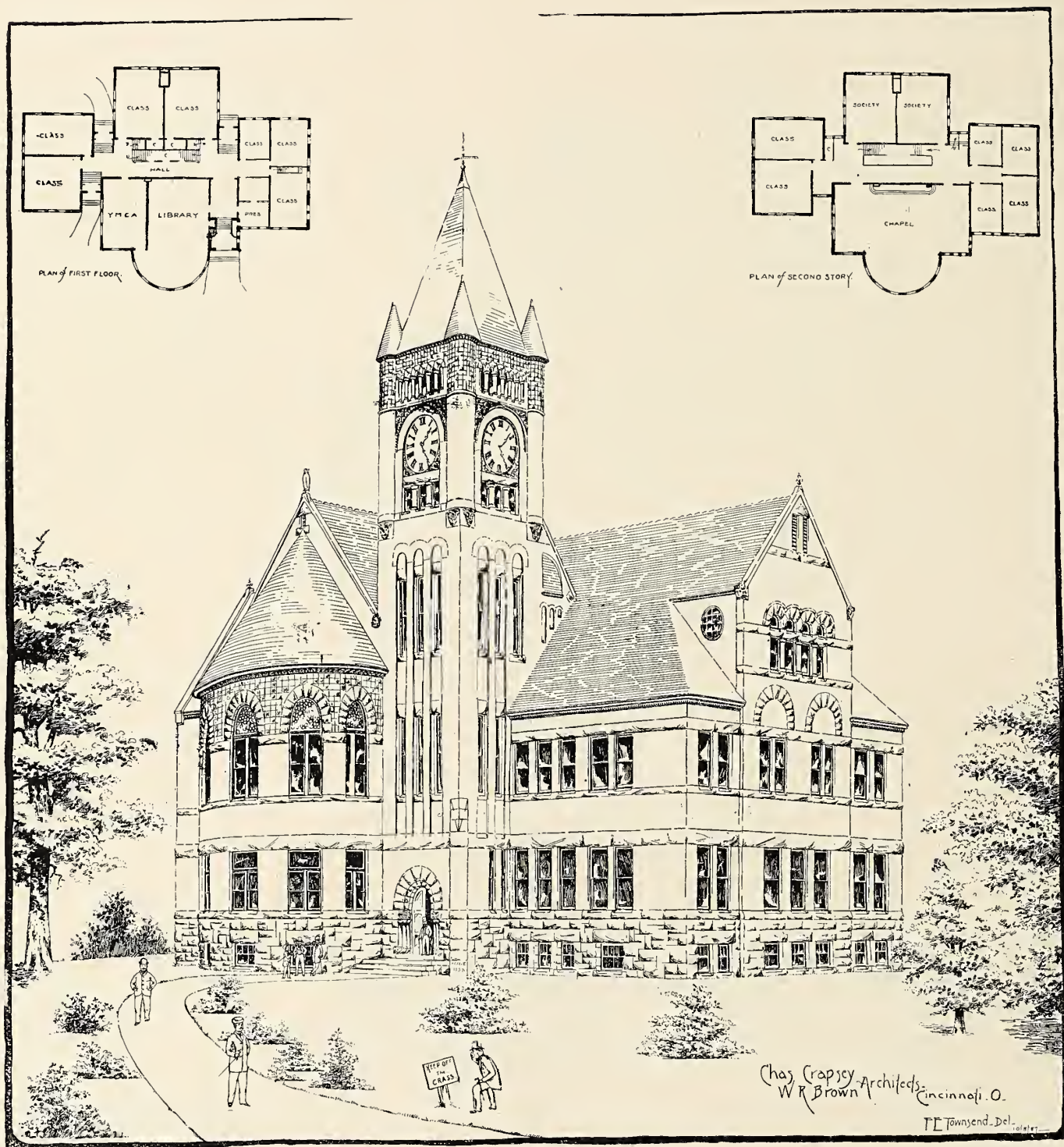
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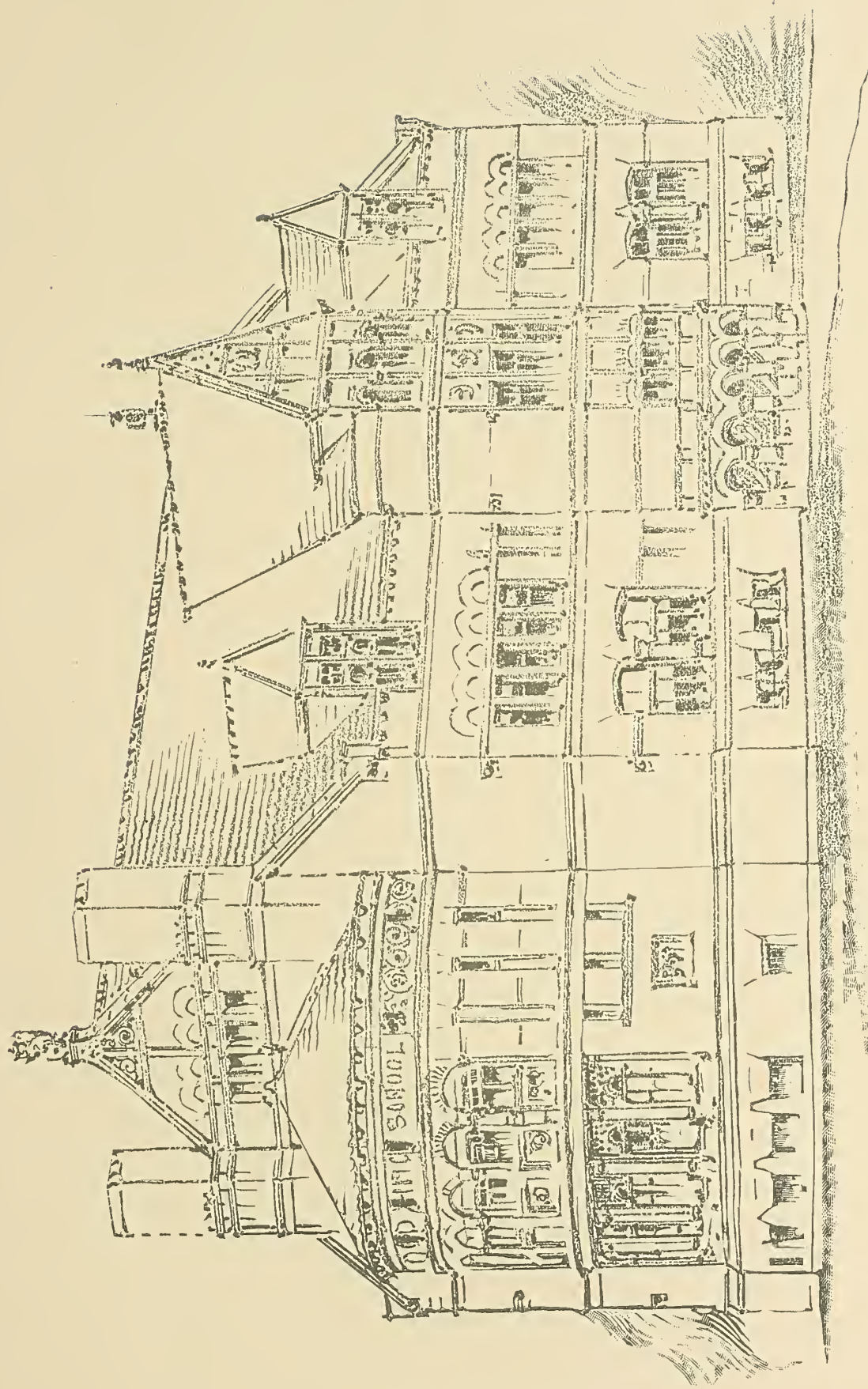
CRAPSEY & BROWN, ARCHITECTS, CINCINNATI.



W. B. Mundie Del

RESIDENCE OF D. H. TOLMAN, CHICAGO.

JENNEY & OTIS, ARCHITECTS.



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ENGLEWOOD HIGH SCHOOL, ENGLEWOOD, ILL.

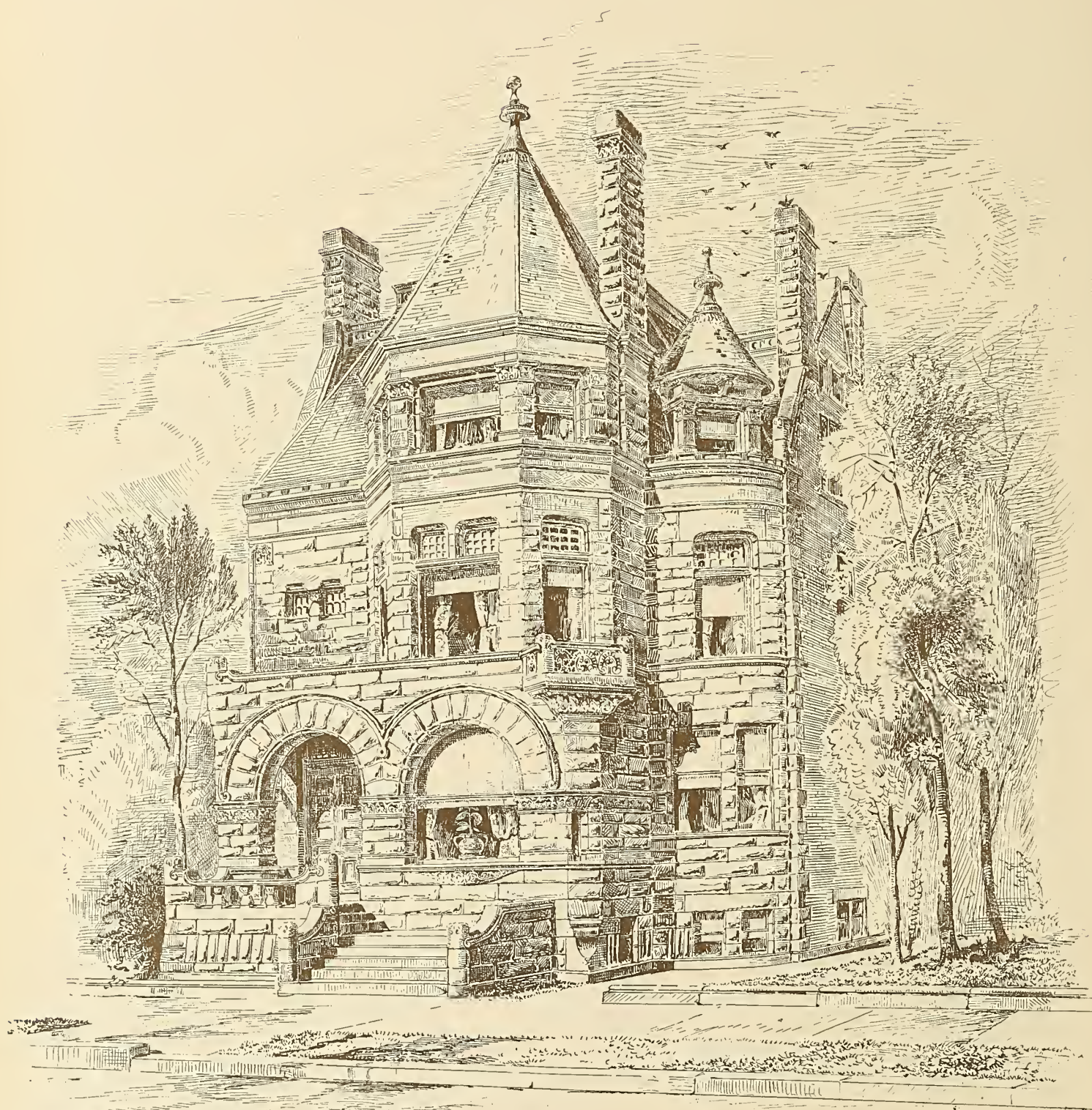
M. L. BEERS, ARCHITECT, CHICAGO.

L.S. BUFFINGTON ARCHITECT
MINNEAPOLIS MINN. 1887.



BANK AND OFFICE BUILDING, MINNEAPOLIS, MINN.

L. S. BUFFINGTON, ARCHITECT.

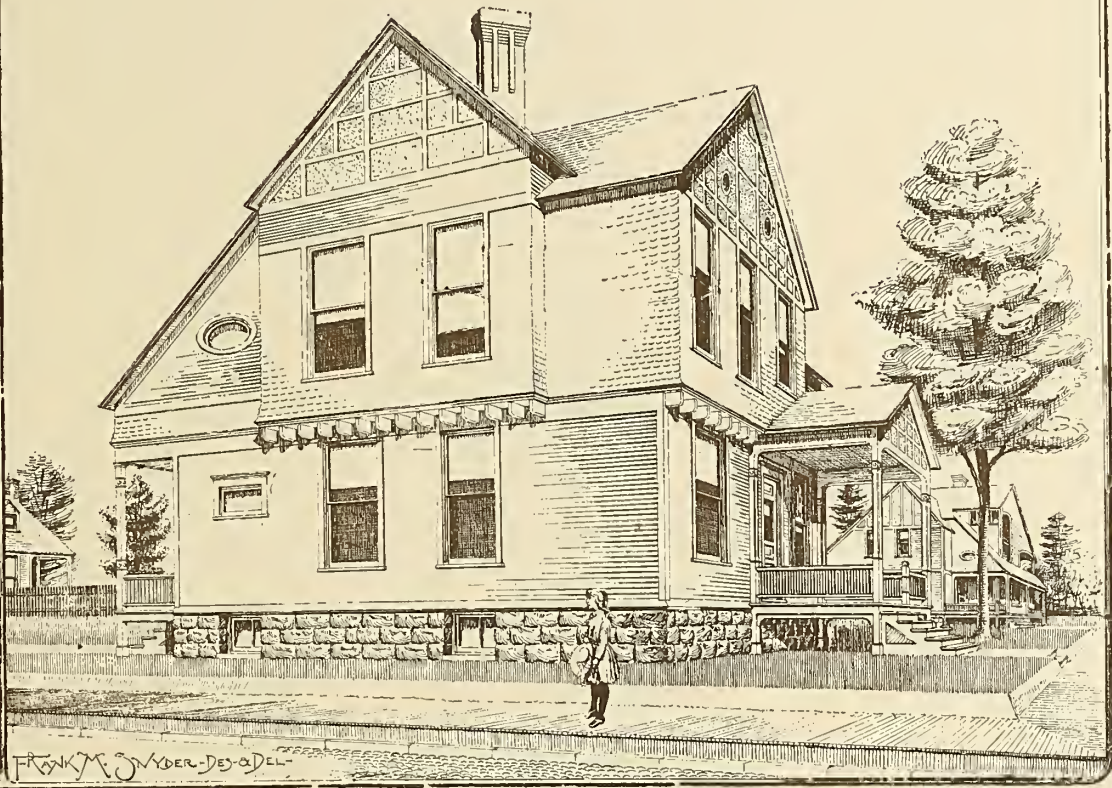
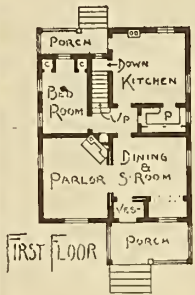


Philip Wilson Del.
1887

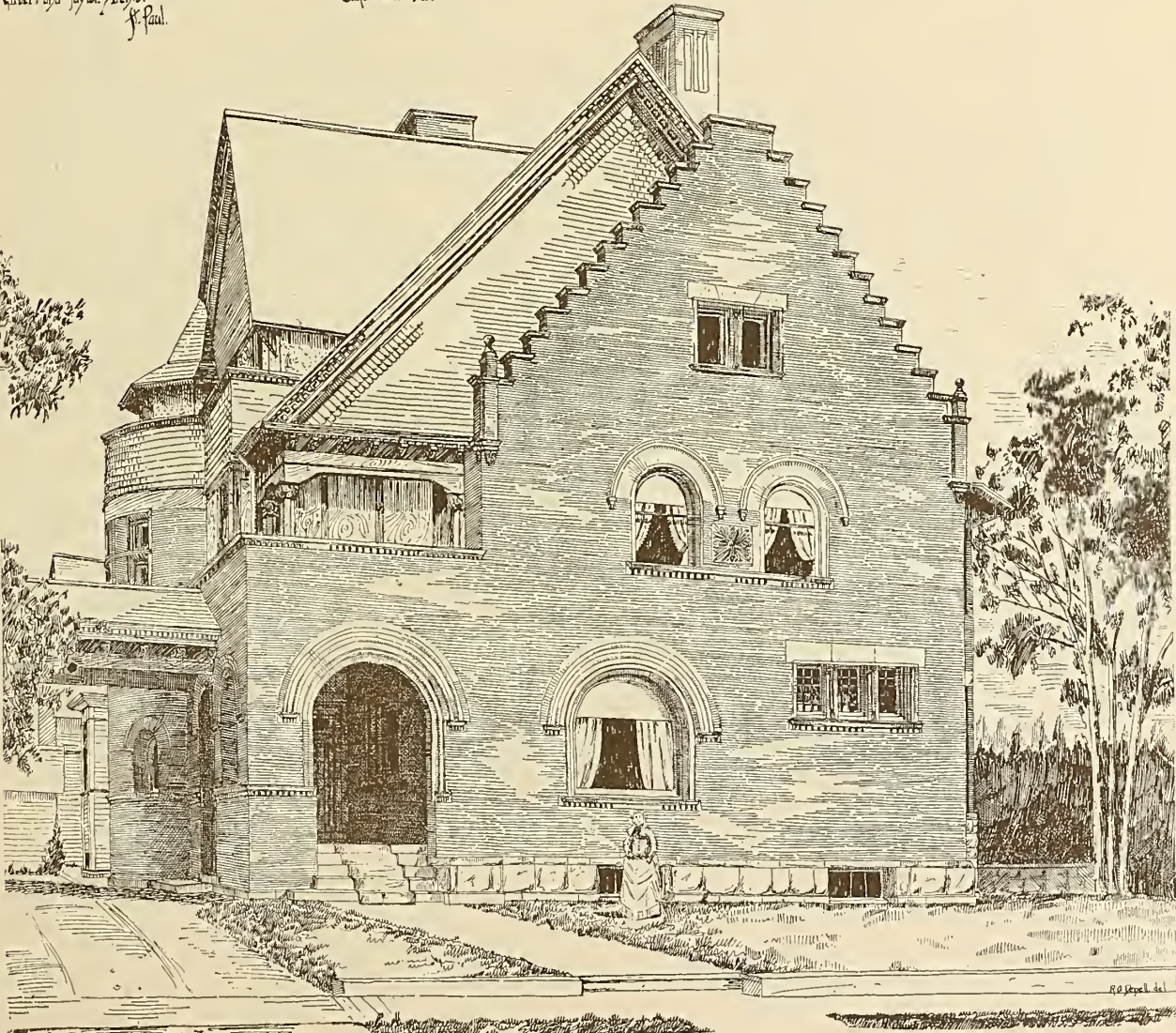
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WILLIAM W. CLAY, ARCHITECT.

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Residence of Mr. Barber.
Gilbert and Taylor, Architects.
St. Paul. Lake View, Ills.





CITY HALL, HAMILTON, ONTARIO.

JAMES BALFOUR, ARCHITECT.



Entered at the Postoffice at Chicago as second-class matter.

A MONTHLY JOURNAL (WITH AN INTERMEDIATE NEWS NUMBER AND A PHOTO-GRVURE EDITION) DEVOTED TO WESTERN INTERESTS.

VOL. X.—No. 10.

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INTERMEDIATE NEWS NUMBER,

DEVOTED TO

ASSOCIATION AND BUILDING NEWS.

PUBLISHED BY

THE INLAND PUBLISHING COMPANY,

CHICAGO, ILL.

THIS Intermediate News Number completes volume X, volume XI commencing with the February regular edition.

NEW YORK state architects interested in the advancement of the profession and the accomplishment of the many projects having for their object the establishment of a better legal and professional status, can do nothing better than strengthen and give their countenances to the work of the Western New York State Association by their attendance upon the second convention of that body, which will convene at Syracuse on February 2. The Executive Committee is arranging to make this both valuable and interesting to all who are so fortunate as to be in attendance.

THE importance of the coming second annual convention of the National Association of Builders, which will be held in Cincinnati, February 7, 8 and 9, is being generally realized by the building trades and material dealers throughout the country. Upwards of thirty-five cities of the United States will be represented, and as only builders' exchanges are admitted, and each delegate represents fifty members, the personnel of the convention is perfectly representative of the building interests. As will be seen by the official programme printed elsewhere in this issue, the deliberations will occupy three days of two sessions each, and most of the time will be taken up with the discussion of vital questions of national interest, though interspersed with a few papers prepared by representative men in the departments of building of which the subject matter treats.

Official Report of the Fourth Annual Convention Missouri State Association of Architects.

THE Missouri State Association of Architects convened at the Hotel Brunswick, Kansas City, Missouri, on January 10, 1888, for the fourth annual convention, Vice-President George Carman in the chair. The following members of the Association were present at the opening of the session: Messrs. J. Bannon, George Carman, E. J. Eccle, E. F. Fassett, C. C. Hellmers, F. B. Hamilton, Howe, J. Oliver Hogg, G. M. D. Knox, L. L. Levering, W. S. Matthews, Wm. Nier, W. W. Polk, Chas. K. Ramsey and Adrience Van Brunt.

The Chair: In the absence of the secretary, the first thing in order will be the appointment of a secretary *pro tem*.

On motion, Mr. Hellmers was appointed to act as secretary *pro tem*.

The Chair: As there are a few members here who desire to leave as soon as possible, and who simply came to help us organize, I think, perhaps, it would be better for the convention to take action on the amendment to the constitution, which was presented at the last annual convention.

Chas. K. Ramsey: I move that the secretary call the roll of members, and that he only call the names of those in good standing. The motion was seconded and carried, and the secretary called the roll of members.

E. F. Fassett: I move that the rules be suspended and that we proceed to the order of new business. It was so ordered.

The secretary then read the following resolution adopted at the last annual convention at St. Louis:

Resolved, That Article I of the By-Laws is amended by striking out "One-third of the members in good standing shall constitute a quorum," and substituting therefor the words "ten members in good standing shall constitute a quorum."

G. M. D. Knox: I move that the amendment as suggested be adopted.

Adrience Van Brunt: Do we understand, Mr. President, that the amendment as adopted will take effect immediately?

The Chair: Yes, sir. The motion was seconded and carried.

The Chair: If there is anybody here to represent the president, we would like to hear from him.

C. C. Hellmers, of St. Louis: Our president, Mr. Annan, was obliged to leave the city very suddenly, and go to New York on important business, and he requested me to state to this Association that he deeply regretted not being able to be present with you, but that it was absolutely impossible for him to be here. He has sent no report.

The Chair: The next thing in order will be the report of the secretary.

Mr. Hellmers: Mr. Illsley, the secretary, not being able to be present today, handed me his report and requested that I present it. Mr. Illsley's report is as follows:

The proceedings of the last convention having been revised immediately thereafter and published in full in the INLAND ARCHITECT, but little remains for your secretary to report at the close of his term of office. There has been no correspondence of consequence, no increase of membership, no case of discipline, no extra meeting to record. It is the secretary's duty to issue orders for the payment of all claims against your Association. The stenographic report of the last convention was so inaccurate and incomplete, and the charge made for it so much in excess of previous bills for such service, that the secretary declined to make payment in full, but agreed with the stenographer to submit it to arbitration. Subsequently, however, the latter party brought suit. The result was a final acceptance of the terms offered by the arbitrators but the legal expense involved an additional cost of \$20, so that the ultimate result was a loss of \$10 over the original bill. While there was no saving of expense but a slight loss, it is believed to be good policy to establish the principle that unreasonable claims will not be allowed merely to save the cost of a threatened suit. We are ready to pay every just bill promptly and in full, and are as ready to defend ourselves against imposition, even though it might sometimes be as cheap or cheaper to submit to it.

As secretary for foreign correspondence, your respondent has communicated with several European architectural societies, and has received several cordial responses, which accompany this report. Also copies of the proceedings of the Italian Society of Engineers and Architects at Rome, and of the Academical Society of Architecture at Lyons, France, said to be the oldest society of architects in the world. Your secretary favors the policy of cultivating friendly relations with such foreign bodies by occasional correspondence and interchange of proceedings with other courtesies.

St. Louis, Mo., January 10, 1888.

Very respectfully submitted,
C. E. ILLSLEY.

Mr. Hellmers: I will state, gentlemen, that the result of Mr. Illsley's correspondence was placed in my hands, but not being capable of translating it into good English, I will have to put that into the records unread.

The Chair: Shall we take any action on the secretary's report?

Mr. Fassett: I move that the report of the secretary be accepted. The motion was seconded and carried.

The treasurer made a report in detail. The following is a summary:

KANSAS CITY, Mo., January 10, 1888.

To the President of the Missouri State Association of Architects:

DEAR SIR,—Below you will find my report as treasurer for the year 1887:

Amount received from J. H. Beattie.....	\$84.65
Amount received from fund collected for expense fund at St. Louis, being balance on hand after paying bills.....	46.75
Amount received from dues collected from members for 1887.....	86.00
Total.....	\$217.40
Less amount of bills paid.....	90.46
Balance.....	\$126.94

Yours respectfully,
CHAS. K. RAMSEY, Treasurer.

The Chair: You have heard the report of the treasurer. If there are no objections it will be referred to an auditing committee, consisting of F. B. Hamilton and W. S. Matthews, to report at such time as may be convenient.

The Chair: Are there any other reports?

Mr. Hellmers: There is a Committee on Uniform Measurement, which Mr. George Carman was a member of.

The Chair: I will say in regard to that Committee on Uniform Measurement that early in the summer, and more or less of the time during the summer, I have been either sick or out of town, or both, and therefore I neglected it until, I think, in September some time. I then prepared a set of rules for uniform measurement, and sent a copy of it to each one of the others of the committee in St. Louis, and I have heard nothing from it since. I requested Mr. McNamara to call that committee together in St. Louis, and told him that any action they would take I would approve of. I had formulated my ideas and sent to each one of the committee. I do not know that anything has been done about it.

Mr. Hellmers: There was a committee appointed to act upon the matter of the state licensing of architects and also the state lien law. I believe the St. Louis end of that committee held one meeting, when we discussed the matter, and we discovered that it would be almost impossible for us to accomplish anything on account of the diversity of our ideas, and that is all it has done. I would say this in regard to the difference of opinion of that committee: That each of the committee had different ideas in regard to these matters, one man having one view of it and another having another view, so that everyone of us would be working on the wrong hook, and therefore nothing was done by this committee.

A. H. Ramsden: I move that the committee be discharged and another one appointed. Motion was seconded and carried.

Mr. Knox: I move that we suspend the rules and proceed to the election of officers. Motion was seconded and carried.

Messrs. Knox and Ramsden were appointed as tellers.

After some discussion regarding the method of balloting, etc., the election of officers was proceeded with.

Charles K. Ramsey, of St. Louis, was elected president for the ensuing year, and on the motion of Mr. Polk he was conducted to the chair by Mr. Van Brunt.

Mr. Ramsey: I am very sorry you have elected me at present. I think you have made a mistake. You have elected the wrong man. Mr. Van Brunt is the man you ought to have elected. He was once president of this association, and made the best president we ever had, and would have made a much better one than I think I would. However, I will try to do the best I can. I am very much obliged to you for the compliment, and will do the best I can under the circumstances.

W. W. Polk: I move that the rules be suspended and that Adrience Van Brunt be made vice-president by acclamation.

Motion was seconded and carried, and Mr. Van Brunt declared vice-president for the coming year.

E. F. Fassett receiving the highest number of votes was declared elected as secretary.

Mr. Hellmers: Gentlemen, we have a gentleman down at St. Louis (as I understand the treasurer will probably be there) who has served us for two years and makes a very efficient and good treasurer, and he would certainly have been here if he had been able to. He is a hard working, and a faithful officer, and I will therefore recommend that Mr. John Beattie of St. Louis, be your choice in regard to the treasurer'ship.

Mr. Ramsden: I move that Mr. Beattie's name be placed before the convention and receive the nomination as treasurer. Motion seconded and carried.

Mr. Hellmers: I move that the nominations be closed. Seconded and carried.

Mr. Hellmers: I move that the secretary be instructed to cast the ballot of this meeting for Mr. Beattie as treasurer for the ensuing year. Motion prevailed, and Mr. Beattie was declared elected treasurer for the ensuing year.

The ballot then being cast for trustees, Messrs. F. B. Hamilton, W. S. Matthews, and G. M. D. Knox, were elected as trustees for the ensuing year.

Mr. Fassett: Mr. President, before we adjourn, there is one subject which has been mentioned here this afternoon, and that is to ask all the members of the association to meet here this evening in a social manner and bring their wives with them, making it an informal social meeting. We have had a notice in the paper that the exhibition of drawings here was free and open to the public.

L. L. Levering: I move that our previous secretary, Mr. Illsley, be declared our corresponding secretary for the ensuing year. The motion was carried.

Mr. Hellmers: I move, Mr. President, that we adjourn until tomorrow morning at ten o'clock. Seconded and carried.

SECOND DAY'S SESSION.

The convention was called to order by Mr. Ramsey at eleven o'clock. Roll was called and the following were present:

G. M. D. Knox, C. E. Illsley, C. K. Ramsey, James Bannon, Wm. Nier, S. E. Chamberlain, A. H. Ramsden, C. C. Hellmers, F. B. Hamilton, T. J. Furlong, E. F. Fassett, J. O. Hogg, George Carman, Adrience Van Brunt, W. F. Hackney, H. B. Pruden, and R. C. McLean, editor of the INLAND ARCHITECT.

Charles K. Ramsey, the president elect, occupied the chair, and E. F. Fassett, secretary elect, filled that office.

Mr. Hellmers: I move that the reading of the minutes of the meeting of yesterday be dispensed with. Seconded and carried.

The President: Next in order of business will be the reports of committees.

Mr. Hellmers: I would say, Mr. President, in regard to the Committee on Legislation and Lien Law, that Mr. Chamberlain has a communication from a lawyer on the subject of architects' liens, and perhaps it would be of interest to the convention to have Mr. Chamberlain present that. Outside of that there has been nothing done, owing to the difference of the opinions of members constituting that committee.

Mr. Chamberlain: Mr. Chairman, as I was not with you yesterday, I did not know what would be done today. I supposed probably this matter would come up today, and to be prepared on the subject so far as I could be, I got the assistance of an attorney to hunt up the law and write out his opinion of the law as it is, and what we had better do. But now, as the committee is discharged, there is nothing for me to say.

The President: There was a resolution to appoint a new committee on that subject, and of course if there is any light that can be thrown on the matter, it is in perfect order to bring it forward now.

Mr. Chamberlain: I have the attorney's opinion with me, and it is as follows:

KANSAS CITY, Mo., January 10, 1888.

S. E. Chamberlain, Esq., Kansas City, Mo.:

DEAR SIR,—Referring to the mechanics' lien law of this state, with reference to lien of architects for professional services, I have to say that the Court of Appeals has held that under our statutes an architect, as such, has no lien either for plans, specifications or superintendence of work. (Confirmed by Supreme Court.)

Our statute is as follows: "Every mechanic or other person who shall do or perform any work or labor upon, or furnish any materials, fixtures, engine, boiler or machinery for any building, etc., upon land, etc., under and by virtue of a contract with the owner, etc., shall have, etc., a lien, etc." Courts of other states, passing upon other statutes, have held otherwise.

In New York: "Whoever performs labor or furnishes material for erecting a house shall have a lien." (Held in 13 Minn., page 473. That architect has lien for plans, specifications and superintendence.)

So, also, where every mechanic, workman or other person doing or performing any work toward the erecting of any building—declared explicit in favor of lien of architect and builder—so also where any person shall perform any labor in building any house architect was only allowed for superintendence. (26 N. J., page 397, and 76 N. Y., page 50.)

Where a lien is given for work done or materials furnished for or about the erection or construction of a building—held architect was entitled to lien for superintendence connected with his own labor. (Phillips' mechanics' lien, Sec. 158.)

I am of the opinion that while the architect under our statute superintends and prepares plans, etc., he is justly entitled to a lien; but on the contrary, if the architect simply engages to prepare the plans, etc., for the construction of a building, and does not reserve the right, as a part of his contract with the owner to supervise and superintend, then he cannot, under the most favorable construction, be entitled to a lien. You will observe that so far as this opinion is favorable to the architect, it is nevertheless opposed to and in the face of both the decisions of our court of appeals and the supreme court of the state, but I maintain this is a fair construction of our statutes.

Very respectfully,

S. F. JOHNSON, Attorney.

Mr. Hellmers: Now, Mr. President, the object I had in bringing that up was that I have understood, since I have been here, that there are certain difficulties in this city which architects have in collecting their fees. It is something we do not have in St. Louis, and I brought this matter up so that the committee to whom you have referred the matter might be informed as to the advisability of improving the condition of the architects in this respect. I have never been much in favor of it, but if it is necessary to protect the architects by including them, I say include them, and that was my object in having Mr. Chamberlain read this communication.

Mr. Chamberlain: Mr. President, as long as we have a lien law, which of course we will have, we might as well be included, as well as anyone else, for our lien.

Mr. Hellmers: I move that the president appoint a committee of five to look into the subject of amending the lien law, and that that committee have nothing else to do. Seconded and carried.

The President: There have been two applications for membership, both of which have been before the Executive Committee, and I have their reports here, which are favorable, and the secretary will read them.

The Secretary: The first is the application of W. F. Hackney, who is a regular architect in this city, and the second of H. B. Pruden, of this city.

The President: That is all the action that is necessary. I will state here, as soon as these gentlemen present themselves, and make themselves in good standing they will be admitted to full membership.

A long discussion took place in regard to the payment of dues, the chair holding that dues paid by new members applied on the past year. This led to the presentation of the following resolution by Mr. Illsley, seconded by Adrience Van Brunt:

Resolved, That all new members who participate in any annual convention by voting, shall be held liable for annual dues of the preceding year.

Mr. Hamilton: I move as an amendment that the words "by voting" be omitted. Motion seconded.

Mr. Knox: This is an amendment to our by-laws, and it ought to lay over.

The President: No, this is a matter of instruction, and not an amendment to the by-laws at all.

The vote was then taken on the amendment to the resolution, and the amendment was lost. The vote was then taken on the original resolution, and the resolution adopted.

Mr. Hellmers: I move that this matter of dues and fees be left to the Executive Committee for them to decide, and that we do not occupy any more of our time at present discussing the subject. Motion carried.

The Secretary: I have the report of the Auditing Committee, who report upon the account of Mr. Ramsey, treasurer, and report that the same is correct. On motion the report was adopted.

The President: We will proceed to unfinished business.

Secretary: There is one thing, I think, we have forgotten, and it is a matter which we ought to attend to, and that is in regard to the death of one of the members of this state association, the oldest architect, undoubtedly, in the state—the late J. D. Towle, of this city. He died, I think, some time in June, and was at our last convention in this city, in 1886.

Mr. Illsley: I think that a committee should be appointed to draft resolutions, and I move that the chair appoint a committee of three Kansas City architects to draft resolutions concerning the death of Mr. Towle, and have them spread upon the records of this association, and also published in the Kansas City newspapers, and in THE INLAND ARCHITECT. Seconded and carried.

Mr. Hogg: I offer the following resolution:

WHEREAS, This association is informed that it has been formally recognized by the Société Centrale d'Architecture de Belgique as a corresponding architectural association; therefore,

Resolved, That this association cordially accepts this relationship with the Belgian society, and directs an exchange of courtesies with the Belgian society.

Mr. Illsley: I rise to ask a question. Is this opinion, written by the lawyer, Mr. Johnson, and read here, for the benefit of this association? If so, we ought to pass a vote of thanks. If, however, it was simply presented to Mr. Chamberlain, I should think it advisable to insert it in our proceedings.

Mr. Chamberlain: The only reason I got that opinion was to help me as a member of that committee. I got it for my own personal use, and of course for the use of the association.

President: I will appoint, as the committee to draw resolutions on the death of J. D. Towle, S. E. Chamberlain, W. S. Matthews and E. F. Fasset.

Adrience Van Brunt: In view of the possibility of its being overlooked, I will move a vote of thanks to Mr. Hayes, of the Hotel Brunswick, for the use of this room. Seconded and carried.

Adrience Van Brunt: Mr. President: In view of the absence of any other important business, there is a question which I would like to have brought before the convention with a view to simple discussion. At the last convention of the Western Association, there was a committee of five appointed to confer with a similar committee appointed by the American Institute of Architects, with a view of considering the feasibility of consolidating the various architectural societies of the country. I am one of that committee. A short time ago, perhaps a month ago, I received a letter from Mr. Adler, who is chairman of the committee, asking me to formulate my views in the matter, and informing me that he had corresponded with the other members of the committee also to get their views, with the object of getting them printed, and forwarding them back and forth, so that we could be posted on the views of the other, so that, in the event of the calling of the committee together, they could consider the subject intelligently. What I want to do now is, to have the convention discuss this matter informally, and to get the views of the members, and I think perhaps it would help me out a little in this matter. There is a diversity of opinion, I know, among the different ones I have talked with, as to whether this thing is feasible at all, or if advisable, in what way. In order to provoke discussion, I will say that I have thought the matter over some, and have come to something like this conclusion: That the consolidation of all the societies of the country is desirable, and also that there should be one so-called parent society, with headquarters in some large city, and preferably, Washington, as being the place where no jealousies could arise between different states, and that a secretary be placed in charge with a salary to carry on the correspondence of this society; that there be chapters of this society, state chapters, and that the state chapters have subordinate societies in the larger cities of the states; that the conventions of the state societies be held immediately preceding the annual convention of the parent society, and that each convention elect one, two, three or more delegates to attend the general convention. That would bring at least a good attendance, and the secret success of all our conventions is a good attendance of men who will have something to say, and who will get up and say it. The matter of expenses would have to be paid by the societies. There should be also members at large of individual practitioners elected outside of each society. Then, as to the name of the parent society, of course we would have to determine that. My own impression was, after thinking it over, and I know there will be some feeling against that among some of our Western Association, my own feeling was this: The American Institute of Architects is an old society; it has been in existence for more than thirty years. The organization of a new society, taking the name of the American Institute of Architects, would be simply an entirely new organization under the old name. My only reason for that would be, that the Institute has had a great deal of influence for good in legal decisions. It has a schedule of charges as standing in the courts and all that, which our western organization has never had. I think that this would be an interesting subject to discuss in the absence of other business, and I would like very much to get the views of individual members on this question. What I mean is, that this should be entirely informal, not to be put in the shape of a resolution, or anything of that kind.

Mr. Illsley: I feel great interest in this subject. I have been one who pushed to elicit the views of members. One difficulty in eliciting views is, that it is a matter to which we have not paid much thought ourselves, and comparatively few of us have sufficiently digested the matter to express our views. In general I imagine one great organization would have power that no small organization could have. The name of the American Institute is known here and abroad. Its recognition in the courts we know, is beyond that of any organization, and those things seem to favor. Therefore, out of no disrespect to the American Institute, I will

remark that it is too slow. It has not been successful in organizing the architects of any part of the country to any great extent, and almost wholly unsuccessful out west. So I do not suppose anyone believes that the adoption of its methods of work would be successful. That is not proposed. I should rather doubt the feasibility of any one body which is to meet once a year, and depends for its success on a large representation. I do not think that is practicable over this country. The attendance would be much too small to be representative, so I do not believe it is practicable. My understanding is, that the paper read by Mr. Burnham before the Illinois State Association did not propose any such thing. What would be known as the American Institute would stand in the same relation to other architectural associations as the congress of the United States stands to the state legislatures. It seems quite clear to me that must be the nature of the organization. My impression is that the association must be limited in its province with very general provisions, such as defending the architect's right to payment for his services, the support of a schedule of charges, etc., precisely as the congress of the United States deals with matters that relate to the whole country, while the internal government of each state is left to its legislature. And I will close by saying, that it appears at the present time that each local association, the Kansas City association, we in St. Louis, the Illinois association, etc., should be stimulated in some way to bring up this matter for an early home for the Western Association discussion, and then any ideas that might be elicited there should be communicated to the representative member of our state association, so that he could deal with those of other states in relation to the Western Association.

Mr. Hellmers: I move you, Mr. President, that the report published in THE INLAND ARCHITECT of the proceedings of this convention be considered the official report of this association. The motion was seconded and carried.

Mr. Hellmers: There is one other matter that we might dispose of. That is this: Several of our corresponding architects of the associations or societies have forwarded to our previous secretary volumes containing the reports of their proceedings, and as these volumes are slowly accumulating, it would be well to provide some place to keep them, and as we in St. Louis, unfortunately, have no headquarters, and our Kansas City brethren are provided with suitable rooms and quarters, I would make a motion to the effect that these books, as they accumulate, be placed in the hands of the Kansas City members to be placed in their rooms, and to remain there until further occasion may dispose of them, and that the Executive Committee be instructed to do that, and that all matters so accumulating be left with the Kansas City chapter, providing, of course, the gentlemen are willing to accept the charge.

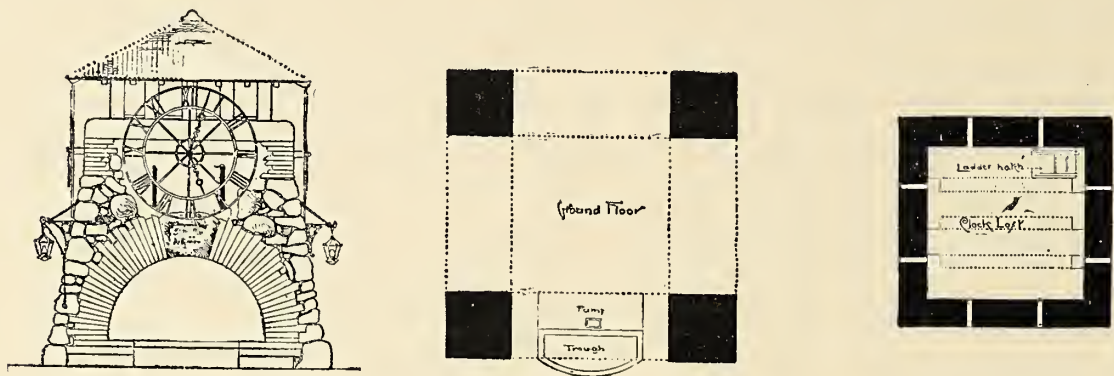
Mr. Illsley: There is another matter which I would like to present. It will have to be in a sort of informal way, too. Several of the foreign associations have a committee on jurisprudence, which has been found of great value to its members. That committee is authorized in some way that I cannot now detail to you, to employ legal counsel, so that if any member of the association asks a legal question, or a question about how to deal with a client as to any legal matter, he sends his question to the committee on jurisprudence and receives a valuable opinion on it. That it may determine him as to whether he shall bring suit or not, or in case he institutes suit, I think that is provided for also—I am not fully informed about it. But it would enter into my scheme, that in some way we should arrange to select some competent attorney, and arrange with him that he would make himself familiar with the law in all matters relating to architects. There are comparatively few lawyers who know much about it. That he should make it a point for some proper compensation, to post himself on the law, and when he has given a question he is to give an answer, and if civil suit is instituted, he shall take the suit. Perhaps one way to manage it would be, to make a charge to each member for such legal opinion of a dollar. He would be called the attorney of the Missouri State Association of Architects. Perhaps we could give him a salary of \$50 a year, and in case a suit was begun, he should take it, and the association should contribute from its funds to defray the expenses of the suit. If we had some such lawyer, I think we should be assured of better advice than we have now. I think we would save members in some cases from entering suit; in other cases it would encourage them to defend their rights, and if that policy became known, I think in many cases clients would settle if they knew an expert association lawyer was prepared to take the suit for the association. I do not think there will be much disposition to rush unnecessarily into litigation, since it would also come out of their own pockets. Now, that is the outline of what has been in my mind for some time.

Mr. Hellmers: I think the idea advanced by Mr. Illsley is a very bad one. We are rather too limited in our financial strength to undertake anything of that kind. If I recollect rightfully, where this scheme has been put into operation is in France, where they have what is called a defense fund and a defense committee, and where they have a membership of four or five hundred members, and I do not believe that with our membership that we have we could make it work practically. I may be wrong, but I am a little bit dubious about it. I know they have been very successful there, but I think it is on account of their great strength, better organization and more interest manifested.

Mr. Hamilton: The Western Association has a committee appointed to collect legal cases.

Mr. Hellmers: That is not for this purpose. It was simply appointed to gather such decisions as they could, and publish them in a pamphlet. It is not for the benefit of members. Members were not to get information themselves of that committee at all. It is simply to publish the decisions and all points relating to the building interests, and not for that purpose. I would like to say one word more. That I got a letter from Mr. Fisher, of Omaha, about a week ago, asking me if I knew of any decision in a case where an architect had been sued by his client for damages, and where the claim was based on a lien filed on the buildings by a mechanic. I have searched what records I have in my possession,

[Continued on page 110.]

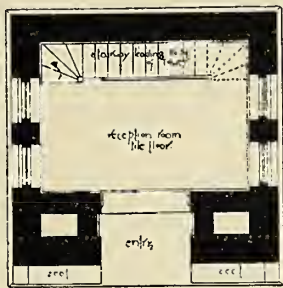


By permission of Art Age.

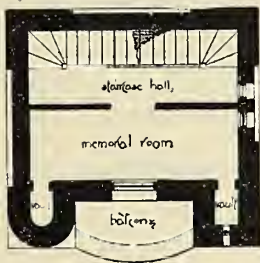
A MEMORIAL CLOCK AND BELL-TOWER ON A VILLAGE GREEN.

FIRST PRIZE DRAWING OF THE ARCHITECTURAL LEAGUE MEDAL COMPETITION. DESIGNED AND DRAWN BY
JAMES A. MACLEOD, OF MINNEAPOLIS.

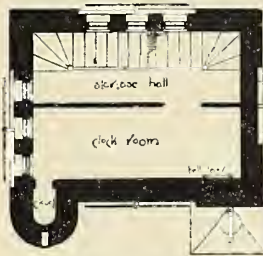
Materials: walls of boulders and flagging; roof, red Spanish tile; clock dial and hands, wrought iron; lanterns, wrought iron; trough, stone; woodwork, oak, oiled; pump, wood.



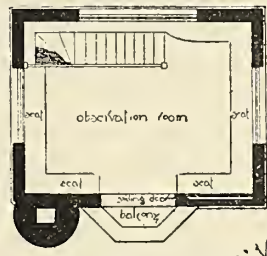
Ground Floor



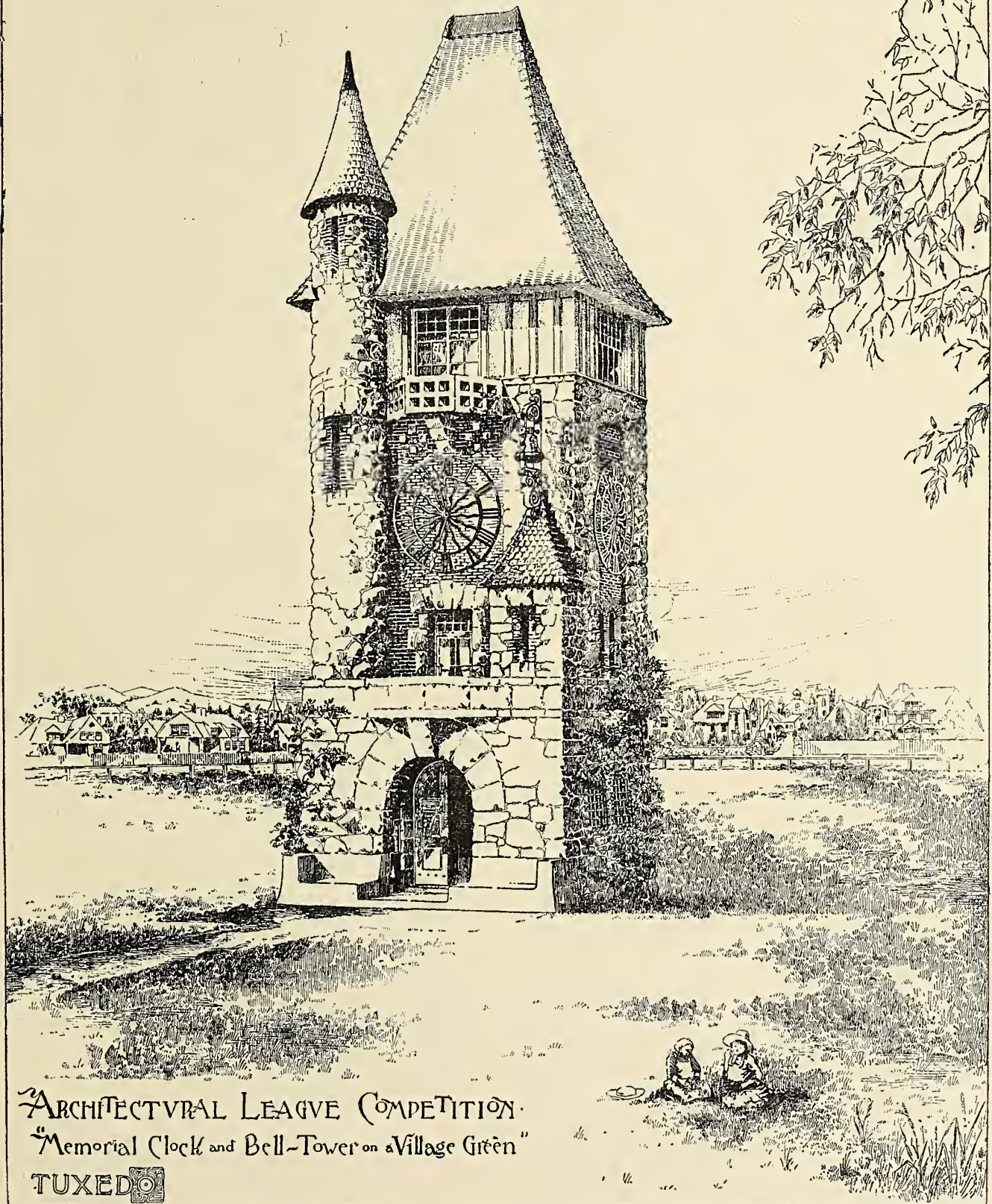
Second Floor



Third Floor



Fourth Floor



ARCHITECTURAL LEAGUE COMPETITION.
"Memorial Clock and Bell-Tower on a Village Green"
TUXED

SECOND PRIZE DRAWING. BY W. B. MUNDIE, OF CHICAGO.

By permission of Art Age.

Materials: walls of boulders, openings laid up with brick jambs; the brick panels on elevations laid up in red mortar; roof to be of red Spanish tile; fourth story, cement and timber work; clock dial, bell support and gratings, of wrought iron.

[Continued from page 107.]

and have up to the present moment been unable to find any similar case. I do not believe there is a similar case on record, where an architect has been held for damages on account of liens, and I would like to ask the members if any of them know any such case.

Mr. Illsley: I move the appointment of a committee by the chair, of three, to be called a committee on jurisprudence, to see what can be done, and have it published in the proceedings that any member of this society having any legal questions, may write to this committee, and that they report at the next convention any modifications they think necessary.

I make the motion for reasons that occur to me. It is desired that there shall be a strong inducement for our architects in this city to become members of this association. If other architects knew that by becoming members they could get a valuable legal opinion they would be likely to join. We can consider it in a simple way, and experience can suggest something more. I feel positive that if we could get some reliable attorney as counsel, so that clients would know that it was not safe to trifle with architects, that they would get their rights; so I move that the chair appoint a committee of three on jurisprudence for the coming year. Seconded and carried.

The secretary then read the following resolution:

WHEREAS, The Great Architect of the Universe has called our late fellow associate, J. D. Towle, from our midst, and

WHEREAS, For more than fifty years Mr. Towle was an honorable practitioner in his profession of architecture, and was the oldest architect in the state of Missouri, and at the day of his death was a member in good standing of this association, respected by all who knew him,

Resolved, That a record of his principal works and honorable mention of his standing as an architect be spread upon the records of this association, and a copy of these resolutions be sent to the family of the deceased.

(Signed)

S. E. CHAMBERLAIN,
W. S. MATTHEWS,
E. F. FASSETT.

On motion, the resolution offered by the committee was adopted.

The President: I will announce a couple of committees as follows:

Committee on the Lien Law: C. C. Hellmers, A. Van Brunt, C. E. Illsley, A. H. Ramsden, T. J. Furlong. Committee on Jurisprudence: C. E. Illsley, George Carman, F. B. Hamilton.

Mr. Ramsden: I move you that we hold our next meeting in St. Louis. Seconded and carried.

Mr. McLean was then called for, and referred to the different subjects that had been discussed during the convention.

On motion of Mr. Hamilton, the convention adjourned to the second Tuesday in January, 1889.

Chicago Builders' and Traders' Exchange.

THE annual meeting of the Builders, and Traders' Exchange, of Chicago, was held January 16.

The election of officers was the most interesting feature, the polls being open from twelve to four o'clock. The following ticket was reported by the nominating committee as the regular ticket for 1888:

For president—George Tapper.

For vice-president—Adam Weckler.

For second vice-president—J. G. McCarthy.

For treasurer—Joseph Downey.

For secretary—James John.

For board of directors (two years)—Chas. G. Singer, Frank B. Alsip, A. E. Wells, August Zander and F. E. Spooner.

For inspectors of election for 1889—T. A. Dungan, R. F. Conway and C. B. Shefler.

The following "opposition" ticket was circulated, and was received with almost equal favor by the members, as a large proportion of its nominees were elected:

For president—Mat. Benner.

For first vice-president—Francisco Blair.

For second vice-president—Martin Madden.

For treasurer—Joseph Downey.

For secretary—J. W. McGraw.

For board of directors (two years)—Wm. H. Iliff, Frank S. Wright, P. Edgeworth, E. A. Thomas and Thomas Moulding.

For inspectors of election 1889, C. C. Bishop, J. B. Simpson and George Rice.

The Exchange met in the evening for the purpose of transacting the annual business. The following officers were declared elected for the ensuing year: President, George Tapper; first vice president, Francisco Blair; second vice-president, William Madden; treasurer, Joseph Downey; secretary, John Pettigrew; board of directors, W. H. Iliff, E. A. Thomas, Thomas Moulding, F. S. Wright and A. E. Wells; inspectors of election, 1889, Geo. Rice, C. C. Bishop and C. B. Shefler.

Of the officers elected, the president, George Tapper, was reelected, his popularity in the Exchange giving him a handsome majority, though one of the best members of the Exchange, Mat. Benner, competed for the position. The vote stood 165 to 116.

The treasurer, Joseph Downey, was also reelected, and his popularity in the exchange and the esteem in which he is held by the members from a point of integrity is indicated by the votes, of which, out of a total number of 280, he received 279.

The closest contest was for the office of secretary. In this the vote stood 112 to 113 in favor of Mr. Pettigrew. This office, which has a salary of \$2,000, and should not be an elective one but left to appointment by the board of directors, was contested by the acting secretary, James John, on the ground of ineligibility, his firm (the Chicago Building Stone Company) being a member and not Mr. Pettigrew, the individual, and that votes by proxy had been received in favor of Mr. Pettigrew, and two votes for the regular ticket sent by telegraph from a distant city had been refused. However, this matter was practically settled at the meeting

of the board of directors, January 21, at which the new officers were installed, by the resignation of Mr. Pettigrew in favor of Mr. John.

The entire contest was most friendly, as the feeling is strong in the Exchange that every member is eligible to office and the best man wins.

Secretary John submitted a report, which showed the membership to be 511, and the receipts and expenditures of the year.

The treasurer's report is as follows, and shows the financial condition of the Exchange to date:

CHICAGO, January 16, 1888.

To the Officers and Members of the Builders' and Traders' Exchange:

GENTLEMEN,—I herewith submit my report as treasurer for the year ending January 16, 1888.

Balance on hand January 17, 1888 \$10,187 28

Amount received from secretary to date 9,924 00

\$20,111 28

By orders paid 251 to 368 inclusive 10,253 40

Balance on hand \$9,857 88

Respectfully submitted,

Jos. DOWNEY, Treasurer.

After discussion relative to the convention of the National Association of Builders at Cincinnati, the meeting adjourned.

A called meeting of the Exchange was held January 23, for the purpose of considering the reports of standing committees of the National Association of builders.

Mr. Tapper occupied the chair and stated that the meeting was called in order that the members might discuss these reports, and in that manner instruct their delegation in regard to the views of the Exchange.

The reports of the Legislative Committee on contracts, on lien law, on apprenticeship and on manual training were read and generally concurred in, and the secretary was instructed to provide the chairman of the delegation with copies of the resolutions passed regarding them.

The following notice is bulletined:

The Committee on Membership have referred to them the revision of the by-laws of the Exchange. They request any member to hand to D. V. Purington, chairman of the committee, in writing, any suggestion in regard to such revision that he may deem proper.

A circular has been issued to members of the Exchange, instructing delegates or others who intend being present at the National Convention to send their names at once to James John, secretary of the Exchange, so that arrangements can be made with the Gibson House, Cincinnati, for their reception. While it has not been announced by the Exchange Committee on Railroads that a rate of fare has been secured, it is probable that the rate will be \$11.50 for the round trip from Chicago and return.

National Association of Builders.

THE official programme of the second annual convention of the National Association of Builders has been received from the secretary and is as follows:

OFFICE OF THE SECRETARY, BOSTON, JANUARY 9, 1888.

Programme for the second annual convention to be held at Cincinnati, Ohio, on Tuesday, February 7, Wednesday, February 8, and Thursday, February 9, 1888.

The Executive Board makes the following announcement for the information of delegates:

The Builders' Exchange of Cincinnati, which will have in charge the detail of the convention, has made arrangements for the accommodation of delegates and others who may accompany them, at the Gibson House.

Exchanges will please send at once to Mr. L. H. McCammon, secretary of the Builders' Exchange, Mechanics' Institute building, corner Sixth and Vine streets, Cincinnati, the names of delegates, alternates, and others who may intend to be present, in order that rooms may be allotted to them in advance of their arrival.

Delegates who intend to bring ladies with them are requested to give notice to that effect, as special arrangements will be made for their entertainment.

Each delegation should have badges, with the name of the city and association represented in gilt letters—to be worn by each delegate on the left coat lapel.

The sessions of the convention will be held in College Hall, directly opposite the main entrance of the Gibson House.

The convention will be opened on Tuesday morning, February 7, at ten o'clock. Morning and afternoon sessions will be held each day.

The large amount of business to be transacted makes it imperative that delegates should be present promptly at all sessions, and particularly at the opening session on Tuesday.

Each delegation should bring credentials of their appointment, signed by the secretary of the exchange they represent. Each delegation should elect a chairman and hand in his name with their credentials.

Delegates desiring to offer resolutions, should present them in writing—in duplicate—signed by the person offering them.

The order of business for the convention will be substantially as follows:

TUESDAY, FEBRUARY 7, 1888.

MORNING SESSION, 10 O'CLOCK.

1. Calling to order and opening address by the president, J. Milton Blair.
2. Appointment of Committee on Credentials.
3. Recess—to afford opportunity for the Committee on Credentials to receive the same and prepare their report.

AFTERNOON SESSION, 2 O'CLOCK.

1. Report of Committee on Credentials.
2. Roll call.
3. Reading of minutes.
4. Offering and reading of resolutions and communications.
5. Appointment of committee to report time and place for next convention, and to nominate officers.
6. Reports of secretary and treasurer.
7. Reports of standing committees.
8. Reports of special committees.

WEDNESDAY, FEBRUARY 8, 1888.

MORNING SESSION, 9:30 O'CLOCK.

1. Paper on "Improvements and Advances made in Stone Cutting." By Chas. F. Cheney, of Boston.
2. Discussion of report of Legislative Committee on Rules for Estimating Work.

AFTERNOON SESSION, 2 O'CLOCK.

1. Discussion of report of Legislative Committee on Apprenticeship System.
2. Paper on "Improvements and Advances made in Carpentry." By Mr. William Goldie, of Chicago.
3. Discussion of report of Legislative Committee on Uniformity in Lien Laws.

THURSDAY, FEBRUARY 9, 1888.

MORNING SESSION, 9:30 O'CLOCK.

1. Paper on "Improvements and Advances made in Roofing." By Mr. E. E. Scribner, of St. Paul, Minn.
2. Discussion of report of Legislative Committee on Permanent Arbitration.
3. Discussion of report of Special Committee on *Uniform Contracts*.

AFTERNOON SESSION.

1. Report of Committee on Resolutions, and discussion of same.
 2. Report of Committee on time and place for next Convention, and nomination of officers.
 3. Election of officers.
 4. Naming and election of directors.
 5. Unfinished business.
 6. New business.
 7. Adjournment.
- All votes in the convention will be cast by the chairman of each delegation. A stenographer will be present and an accurate report made of all proceedings and discussions.*

The Executive Board anticipate that the business of the convention will be completed in the three days allotted, but that the time will be fully occupied.

The Builders' Exchange, of Cincinnati, extend to the visiting delegates a cordial invitation to attend a banquet at the Gibson House, on Thursday evening, February 9, at six o'clock, and, as the days of the convention will be very much occupied by the business of the convention, allowing little time for them to extend further hospitalities to their visitors, they request that all the delegates remain over during Friday, February 10, to enable them to entertain their guests to their satisfaction.

Associations which have not yet sent to the secretary (Wm. H. Sayward, Boston) their returns of delegates chosen, *will please do so at once*.

The officers and directors of 1887 are requested to meet at the Gibson House on Monday morning, February 6, at ten o'clock, for final session.

Per order of the Executive Board,
W. H. SAYWARD, Secretary.

Association Notes.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS.

The annual meeting of the Wisconsin State Association of Architects was held at Milwaukee, January 9. The following officers were elected for the ensuing year:

President, James Douglas, Milwaukee; first vice-president, H. C. Koch, Milwaukee; second vice-president, W. Waters, Oshkosh; secretary and treasurer, Howland Russel, Milwaukee. These officers, with Prof. A. D. Connors, of Madison, compose the board of directors.

The secretary was instructed to write to E. Townsend Mix and George B. Ferry letters of sympathy and regret at their long-continued illness, both gentlemen having been seriously ill for some time past.

ARCHITECTURAL ASSOCIATION OF IOWA.

The annual meeting of the Architectural Association of Iowa was appointed to convene at Cedar Rapids, January 11, but owing to the severe weather interrupting railway travel, there was not a quorum present, and consequently only an informal meeting was held.

There were present E. H. Taylor, H. W. Josselyn, W. A. Fulkerson and F. D. Hyde. The officers of last year will hold over another year.

The secretary was notified by W. K. Ball, a member of the association, that he was about to remove to Nebraska.

The association will meet August 14, the place to be selected by the Executive Committee.

KANSAS CITY ARCHITECTURAL SKETCH CLUB.

The club is in a flourishing condition, and the new syllabus which is arranged and will be published next month, shows a large amount of work outlined for the coming year.

BUFFALO ARCHITECTURAL SKETCH CLUB.

The next club competition, which promises to be quite interesting, will be for a city residence front, and will be closed February 3. The club is in a flourishing condition, and is doing much good work.

THE ARCHITECTURAL LEAGUE OF NEW YORK.

The league held its annual meeting on January 9, seventy members being present. President John Du Fais in the chair.

The report of the treasurer was so satisfactory that the league contemplates securing permanent quarters before the end of the year.

The officers elected are as follows: President, John Beverly Robinson; vice-president, Frederick Crowningshield; executive committee, Henry O. Avery, Charles I. Berg and James D. Hunter.

The following official notice has been received concerning the recent award of prizes in the league competition:

DEAR SIR,—The following were the awards in the "Memorial Bell and Clock Tower" competition for the gold and silver medals of the Architectural League:

The gold medal—James A. MacLeod, Minneapolis, Minnesota.
The silver medal—William B. Mundie, Chicago, Illinois.

Honorable mention—Julius Harder, New York City; William C. Noland, Philadelphia, Pennsylvania; Timothy F. Walsh, Cambridge, Massachusetts.

Forty-four sets of designs were received, and forty-three considered, one—signed with a monogram composed of two E's—being thrown out for non-compliance with the conditions.

Respectfully yours,
RICHARD M. HUNT, JOHN DUFAIS,
CHARLES F. MCKIM, CHARLES I. BERG,
RUSSELL STURGES, WILLIAM C. HAZLETT, Chairman.

New York, January 19, 1888.

The author of the design bearing a motto composed of three circles interlacing and forming a trefoil is unknown, and his address should be sent to the secretary, Charles I. Berg, 10 West Twenty-third street, New York City.

CHICAGO REAL ESTATE BOARD.

The annual meeting of the Chicago Real Estate Board occurred January 11. The following officers were elected for the year:

President—Henry L. Turner.

Vice-president—George M. Bogue.

Treasurer—Moses E. Greenebaum.

Secretary—James H. Van Vlissingen.

Executive Committee—Willis G. Jackson (two years), E. F. Tetchell and J. Donnersberger (one year).

*THE INLAND ARCHITECT has been engaged to make the official report for the association.

Call Board Committee—F. A. Henshaw, chairman (two years); D. S. Place, Daniel R. McAuley, Pleasant Amick and C. L. Hammond (one year).

Membership Committee—Norman T. Gassette (two years), Samuel M. Parish, Benjamin L. Pease, Edward Goodridge, David W. Erskine, Othello G. Garfield and Charles R. Calkins (one year).

Reference Committee—Josiah L. Lombard, France R. Chandler and J. Whitney Farlin.

Valuation Committee—William D. Kerfoot and Robert W. Hyman, Jr.

The roll of membership in the Chicago Real Estate Board now numbers 132.

The report of Treasurer George P. Bay shows the board to be in an excellent condition financially. It is as follows:

Receipts—Cash on hand December 31, 1886, \$1,973.43; receipts from all sources, \$5,798.17; total, \$7,771.60. Disbursements—Cash paid for sundry purposes, \$4,810.81; balance on hand, \$2,960.79; total, \$7,771.60.

The annual banquet of the board will be given at the Grand Pacific, February 2. The arrangements are in the hands of William L. Pierce, whose work in this direction has been so satisfactory in the past, that this year the full responsibility has been thrown on him. The banquet will be elegant and conservative, the speeches confined to a large degree to honored visitors from other cities, and will probably be one of the most successful ever given in Chicago.

Mosaics.

ARCHITECT D. H. BURNHAM has resigned the chairmanship of the Committee on Uniform Contracts, of the Western Association of Architects, and S. A. Treat has been appointed in his stead.

ARCHITECT B. H. BROWN, until recently the manager in S. S. Beman's office, has resigned and associated himself with Mendelsohn, Fisher and Laurie, at Omaha, as their superintendent. He removed to his new home January 15.

W. H. MCHARG, of Chicago, who represents the Endolithic Marble Company in the West, has just returned from Omaha, where he is placing a considerable amount of endolithic marble. The principal work in hand there is marble work in the banking office of the new United States National Bank, which, when completed, will be one of the most attractive bank offices in the West, through the judicious use of endolithic marble.

THE Hendricks Monument Committee met, January 21, at Indianapolis, Ind., and awarded the contract for erecting a memorial statue to the late Vice-President Hendricks, to W. H. Parks, the designer and builder of the Juneau statue at Milwaukee. The height of the monument is thirty-one feet, the base being eighteen feet and the statue thirteen. The base is of granite, and consists of three steps leading up to a die, on which is a wreath of laurel and oak inclosing the word "Hendricks" in raised polished letters. The statue is bronze, and represents the vice-president as in the act of addressing an audience, his right hand resting in the lapel of his coat and his left hand hanging by his side and holding a parchment. The entire work will cost \$15,000, and the statue will be cast in Italy.

Railroad Notes.

A THROUGH Pullman palace buffet and drawing room sleeping-car will leave Chicago, via Chicago & Alton Railroad, Thursday, February 16, 1888, and run through to Los Angeles, California, without change. Fare, \$80 for the round trip. Tickets good to return for six months, and passengers will have the privilege of selecting any route returning, and of stopping over at pleasure within the extreme limit of their ticket. For further information, and for passage and sleeping-car berth tickets, call at or address city ticket office, Chicago & Alton Railroad, No. 89 South Clark street, opposite Clark street entrance to court house. Robert Somerville, city passenger and ticket agent.

THE "Niagara Falls Route," which, of course, refers to the Michigan Central Railroad, has just issued a winter time table, one side of which is devoted to new and excellent views of winter scenes at Niagara Falls. In the center is a large engraving, taken from an instantaneous photograph, and other views equally interesting, are interspersed with reading matter, descriptive of the peculiar beauties of the falls in the winter season. Bayard Taylor's description of how the falls looked and the impression made upon him during his first visit in 1854; Anthony Trollope's quaint comments upon the same great natural wonder, are given. The severity of the present winter has had its effect upon the falling waters and rising vapor, and woven into fantastic shapes everything it has touched. As the Michigan Central is in reality the Niagara Falls route, and the sights to be seen during the midwinter season are of incomparable grandeur, no more attractive trip could be taken than over that popular railway, and a few days spent at Niagara.

THE "Great Rock Island route" has adopted a fast-time schedule which guarantees a rate of speed between above named points heretofore unattained in western railroading. Its "Council Bluffs and Pacific limited express" leaves Chicago daily at 7:30 P.M., and arrives in Council Bluffs at 11:30 A.M. next day. This is a magnificent train, including Pullman palace sleepers (price of berths greatly reduced) and dining cars. The "Kansas City and Pacific limited express" leaves daily at 5 P.M., and arrives in Kansas City at 9:05 A.M. next day. The equipment of this train is also superior and unsurpassed, consisting (in addition to first-class day coaches) of new and elegant reclining chair cars and Pullman palace sleeping (berths at reduced rates) and buffet cars. Speed, safety, comfort and luxury have long been recognized as characteristics of the Rock Island, and, more than ever, are these traits now exemplified in its fast train service, which guarantees a delightful journey, consuming only sixteen hours' time between Chicago and Council Bluffs or Kansas City. At both these points, connections are made (in union depots) with fast trains running through to California and all points on the Pacific coast.

Synopsis of Building News.

Chicago, Ill.—Architect F. W. Hinsdale: For Geo. Raymond, four three-story dwellings; cost \$25,000.

Architects Flanders & Zimmerman have plans for Jacob Beidler for a manufacturing building, 90 by 187 feet, to be erected on the corner of Union and Washington streets, at a cost of \$175,000. This building was mentioned some time ago in this journal, but will not be commenced until spring. For T. J. Waters, two-story flat building, 25 by 70 feet; cost \$5,500.

Architects Baner & Hill are preparing plans for remodeling the building, 54 by 171 feet, occupied by Montgomery Ward & Co., on Wabash avenue near Jackson, for the use of "The Panopticon," a new amusement enterprise in which are said to be interested such gentlemen as P. D. Armour, Chas. L. Hutchinson, Arthur Blair, Chas. Counselman, Addison Ballard, and others. The building is to be entirely remodeled and have a new front. It is said that the Panopticon will be under the management of Prof. Frederick Verweg, of the Eden Musée of New York, who will join Mr. Hill in Europe for the purpose of selecting novelties in wax figures, etc., for the gallery. It is expected the building will be ready for the opening, June 1, 1888.

Architects Holabird & Roche have prepared plans for Wirt D. Walker for a twelve-story office building, 25 by 101 feet, on the corner of La Salle and Madison streets; cost about \$100,000.

The Iroquois Club are about to convert the St. Lawrence Hotel into a permanent house for themselves. Architects Treat & Foltz are engaged to prepare plans for improvements which will include replacing the present partitions with fireproof ones, adding two stories to the present four-story structure, placing passenger elevators, steam-heating, and electric lighting, at cost of about \$50,000. The new quarters will be ready for occupancy by May 1, 1888.

Architects Donnellan & Bourgeois have prepared plans for E. G. Smith, for a two-story pressed brick and stone residence, 40 by 70 feet, to be erected in Lake View; cost \$30,000. For James Walsh, three-story and basement flat building, 63 by 50 feet, brick and stone; cost \$15,000.

Architect J. H. Huber is preparing plans for a two-story and basement dwelling, 21 by 40 feet; cost \$30,000; also a three-story and basement store and flat building, 24 by 76 feet; cost \$22,000.

Architect L. G. Hallberg: For Wm. Hill, alterations and additions to building at 128 & 130 Franklin street; cost \$20,000.

Architect James H. Moore: For Henry Whilbeck, four-story and basement brick and stone factory building, 42 by 100 feet; cost \$16,000.

Architects Edbrooke & Burnham: For A. McIntosh, two two-story dwellings, 35 by 74 feet; cost \$10,000.

Architect John Otter: For O. Selander, four-story brick and stone flat building, 22 by 84 feet; cost \$17,000. For P. Murphy, frame dwelling; cost \$5,000.

Colorado Springs, Col.—Architect F. T. Lent has prepared plans for a two-story brick school building, 80 by 84 feet; cost \$20,000.

Lincoln, Neb.—Architect E. E. Meyers, of Detroit, Mich., has prepared plans for a court house, to be erected here at a cost of about \$200,000. Plans have also been prepared for an opera house, to cost \$100,000.

Sioax City, Iowa.—Architect C. P. Brown has prepared plans for the Y. M. C. A. building, to cost \$75,000, to be erected here. Also for the new asylum building at Yankton, Dakota.

Spokane Falls, Wash. Ter.—Architect H. Prusse has prepared plans for a four-story brick hotel building, 70 by 100 feet; cost \$70,000.

St. Louis, Mo.—Architect Thos. J. Furlong, reports: For J. M. Carpenter, four two-story cottages; cost \$18,000.

Architect Chas. F. May reports: For the Hoefel Real Estate and Building Company, four-story store and flat building; cost \$9,000. Also a three-story store and flat building, to cost \$7,000.

Architect A. Beinke reports: For Wells & Co., two-story store building, 40 by 105 feet; cost \$6,000. For Mrs. D. G. Cook, two-story residence, to cost \$14,000. For H. W. Barkhofer, two-story store building; cost \$3,500.

St. Paul, Minn.—Architect H. G. Carter is preparing plans for an opera house to be built in this city.

Architects Thomas & Kreitz report: For F. P. Blair, a five-story apartment building, 120 by 120 feet; cost \$220,000. For M. D. Miller, a four-story apartment building, 45 by 76 feet; cost \$23,000. For A. B. Wilgus, a four-story apartment building with all modern improvements. For Major Wright, a double dwelling, 40 by 90 feet; cost \$10,000. For M. Defiel, a four-story office building, 90 by 110 feet; cost \$26,000. For S. G. Moore, four-story business block, 60 by 130 feet; cost \$40,000.

Architects North & Haas report: For John Robertson, three-story stores and flats; cost \$20,000.

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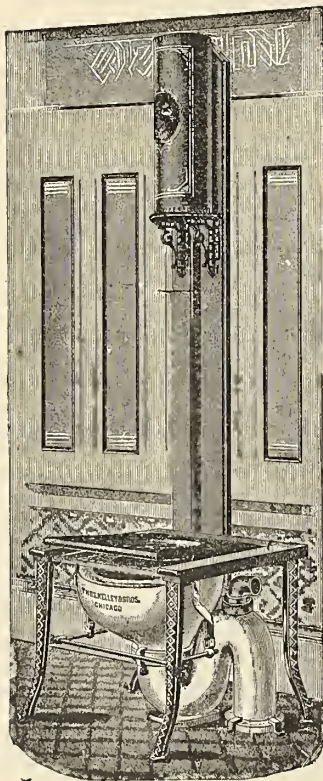
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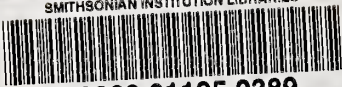
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